



Grand River Conservation Authority

Agenda - General Meeting

PUBLIC

Friday, December 15, 2017

9:30 a.m.

Auditorium

Grand River Conservation Authority

400 Clyde Road, Box 729

Cambridge, ON N1R 5W6

Pages

1. **Call to Order**
2. **Roll Call and Certification of Quorum – 13 Members constitute a quorum (1/2 of Members appointed by participating Municipalities)**
3. **Chair's Remarks**
4. **Review of Agenda**

THAT the agenda for the General Membership Meeting be approved as circulated.
5. **Declarations of Pecuniary Interest**
6. **Minutes of the Previous Meetings**

THAT the minutes of the General Membership Meeting of November 24, 2017, be approved as circulated.
7. **Business Arising from Previous Minutes**
8. **Hearing of Delegations**
9. **Presentations**
10. **Correspondence**
11. **1st and 2nd Reading of By-Laws**

12. Reports:

- a. GM-12-17-138 - Labour Relations - Collective Agreement Negotiations 11
- THAT an ad-hoc committee be formed, called the Labour Relations Steering Committee, comprised of the Chair, the Vice-Chair and one other to be named by the General Membership, and the Chief Administrative Officer
- AND THAT the role of this steering committee will be to provide direction to the management negotiating team, prior to the negotiation of a new Collective Agreement effective January 1, 2018.
- b. GM-12-17-132 - Strategic Plan Update 13
- THAT Report GM-12-17-132 – Strategic Plan Update be received as information.
- c. GM-12-17-133 - Report of the Audit Committee 23
- THAT the report of the Audit Committee be received for information.
- d. GM-12-17-134 - Cash and Investment Status 24
- THAT Report GM-12-17-134 – Cash and Investments Status Report as of November 30, 2017 be received as information.
- e. GM-12-17-137 - Financial Summary 26
- THAT the Financial Summary for the period ending November 30, 2017 be approved.
- f. GM-12-17-128 - Loader Tractor Tender Results 48
- THAT Grand River Conservation Authority award the tender for the purchase of two (2) 30.7 kW (41.2 HP) PTO four wheel drive tractors with cab and fixed front loader attachments to Crossroads Equipment for a total amount of \$106,147.02 (excluding HST).
- g. GM-12-17-127 - Elora Gorge Sanitary Servicing Upgrade - Phase One Tender Results 50
- THAT the Grand River Conservation Authority award the tender for the Elora Gorge Sanitary Servicing Upgrade project to A. Van Egmond Construction (2005) Ltd. in the amount of \$617,475, excluding HST.
- h. GM-12-17-124 - 2018 Conservation Area Fees 52
- THAT the proposed 2018 Conservation Area fees be approved and become effective as of January 1, 2018.

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| i. | GM-12-17-126 - Conservation Areas Year End Update | 62 |
| | THAT Report GM-12-17-126 Conservation Areas Year End Update be received as information. | |
| j. | GM-12-17-125 - GRCA Complimentary Membership Passes | 68 |
| | THAT Report GM-12-17-125 - Grand River Conservation Authority Complimentary Membership Passes 2018 be received as information. | |
| k. | GM-12-17-131 - Environmental Assessments | 70 |
| | THAT Report GM-12-17-131 Environmental Assessments be received as information. | |
| l. | GM-12-17-123 - Permits Online Application Process | 73 |
| | THAT Report GM-12-17-123 Development, Interference with Wetlands and Alterations to Shorelines and Watercourse Regulation On-line Application Process be received for information. | |
| m. | GM-12-17-129 - Grand River Forest Management Plan | 76 |
| | THAT Report GM-12-17-129 – GRCA Forest Management Plan 2018-2027 be received for information. | |
| n. | GM-12-17-130 - Managed Forest and Conservation Land Tax Incentive Program Participation | 83 |
| | THAT Report GM-12-17-130 – GRCA Managed Forest and Conservation Land Tax Incentive Program Participation be received for information. | |
| o. | GM-12-17-135 - Montrose Reservoir Project Update | 86 |
| | THAT Report GM-12-17-135 Montrose Reservoir Project Update be received as information. | |
| p. | GM-12-17-136 - Current Watershed Conditions | 94 |
| | THAT Report GM-12-17-136 – Current Watershed Conditions as of December 6, 2017 be received as information. | |

13. Committee of the Whole

14. General Business

15. 3rd Reading of By-Laws

16. Other Business

17. Closed Meeting

THAT the General Membership enter a closed meeting to discuss a confidential matter regarding a property disposition.

- a. Minutes of the previous closed session
- b. Declaration of Surplus Property

18. Next Meetings

19. Adjourn

THAT the General Membership Meeting be adjourned.

20. Grand River Source Protection Authority Meeting (if required)

Regrets only to:

Office of the Chief Administrative Officer, Phone: 519-621-2763 ext. 2200

Grand River Conservation Authority

Report number: GM-12-17-138
Date: December 15, 2017
To: Members of the Grand River Conservation Authority
Subject: Labour Relations – Collective Agreement Negotiations

Recommendation:

THAT an ad-hoc committee be formed, called the Labour Relations Steering Committee, comprised of the Chair, the Vice-Chair and one other to be named by the General Membership, and the Chief Administrative Officer

AND THAT the role of this steering committee will be to provide direction to the management negotiating team, prior to the negotiation of a new Collective Agreement effective January 1, 2018.

Summary:

Not applicable

Report:

The current collective agreement between the Grand River Conservation Authority (GRCA) and OPSEU Local 259 expires on December 31, 2017. In 2015, negotiations included a written proposal submitted by management, correspondence between union and management and five bargaining meeting days between May and July 2015. OPSEU ratified the agreement on July 8, 2015 and the GRCA Board ratified the agreement on July 24, 2015. The settlement reached was three years in length with the following provisions: wage increases of 1.5% in 2015, 2% in 2016 and 2% in 2017; additional vacation day for all full-time employees (effective in January 1, 2016); introduction of a paid personal day for seasonal full-time employees who meet certain criteria; increase to standby pay from \$25 to \$30/day (effective January 1, 2017); and, various wording changes.

GRCA received notice of the union's intention to bargain on October 31, 2017. The union negotiating team has been established and is comprised of four local union member representatives and a provincial OPSEU representative.

Management has appointed a negotiating team made up of the following individuals:

Karen Armstrong – Manager of Human Resources (Negotiating Team Leader)

Dwight Boyd – Director of Engineering

Sonja Radoja – Manager of Corporate Services

Tracey Ryan – Manager of Environmental Education & Restoration

This team will represent Grand River Conservation Authority in the negotiations, in accordance with direction received from the Labour Relations Steering Committee. The Negotiating Team will meet with the Steering Committee as required. Formal updates on the progress of negotiations will be provided in periodic Labour Relations Reports to the

Board. The General Membership will ratify a new agreement at a monthly General Meeting or a special meeting, if required.

Financial implications:

During this upcoming round of bargaining, wage rates are anticipated to be a key negotiating item. It is expected that the recent *Fair Workplaces, Better Jobs* legislation will generate significant discussion during bargaining. Management has no significant concerns with the current collective agreement other than updating language to incorporate the recent legislative changes.

Other department considerations:

The management negotiating team has been selected to ensure that the team possesses the required expertise and knowledge of issues of interest to the union as well as human resources and compensation issues.

Prepared by:

Karen Armstrong
Manager of Human Resources

Approved by:

Keith Murch
Assistant CAO/Secretary-Treasurer

Grand River Conservation Authority

Report number: GM-12-17-132.

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Strategic Plan Update

RECOMMENDATION:

THAT Report GM-12-17-132 – Strategic Plan Update be received as information.

SUMMARY:

The GRCA strategic plan was developed in 2012. A review of the plan is proposed for 2018. Bill 139 – Building Better Communities and Conserving Watersheds Act 2017, if passed, would provide clarification on the roles and responsibilities of Conservation Authorities. The strategic plan review will provide an opportunity to review existing GRCA programs, and incorporate any changes that would result from the enactment of Bill 139.

REPORT:

This report provides background information on the GRCA strategic plan. On March 23, 2012 the Grand River Conservation Authority approved a new strategic plan. The plan set out five objectives:

1. To protect life and minimize property damage from flooding and erosion
2. To improve watershed health
3. To connect people with the environment through outdoor experiences
4. To maintain an organization with a focus on teamwork, development, engagement and positive change
5. To deliver value and innovation to our watershed stakeholders

Under each objective a number of strategic priorities are identified. This report provides background for the objectives and an update with respect to the status of actions to address priorities.

Strategic Objective 1 – To Protect Life and Minimize Property Damage from Flooding and Erosion:

To achieve this objective the GRCA:

- operates a network of dams, dikes, and systems to manage and monitor river flows;
- manages a flood warning and communication system;
- regulates development in areas prone to flooding and erosion hazards.

Climate change results in more frequent and intense localized rain storms, some of them arise with little warning. Warmer winter temperatures have led to a more unpredictable spring snow-melt period. The changing nature of flooding requires modifications to the

GRCA's flood management program. Additional monitoring equipment is required to detect and respond to weather events. Processes are required to capture vital organizational knowledge prior to a number of key staff retirements. The strategic priorities relate to activities that improve the safety and security of the GRCA's water control infrastructure and improve the tools used for making decisions related to hazard management.

Update on actions to address strategic priorities:

- a) Complete dike and dam safety plans - Dam safety reviews have been completed for Shand, Conestogo, Woolwich and Guelph Dams. A dike safety review has been completed for the Bridgeport dike. A vegetation management plan has been prepared for the Brantford dikes. Luther Dam embankment upgrades were completed in 2013. Work recommended in previous dam safety reviews is ongoing. Work continues to improve the organization of information related to water control structures. A dike safety study was completed for the Cambridge dikes, hydraulic modelling has been completed to confirm dike and bridge capacities
- b) Update water structures capital plan – In 2012 this priority related to financing for the \$20 million dollar emergency spillway at Conestogo Dam. Technical studies have been completed to support alternative methods for managing extreme flows at Conestogo Dam. MNRF has approved an alternate plan and the works can be completed within the normal GRCA capital budget. A five year forecast is updated each year following the spring dam inspections.
- c) Review and document decision support tools - Work is underway on implementing the Water Information System (WISKI) program. This program is a key element of the water monitoring system. Upgrades to the data collection and communication system are underway. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) is currently in the process of obtaining detailed topographic information across the Lake Erie watersheds using Light Detection And Ranging (LiDAR) technology. This base data can be used to generate precise, engineering-grade three-dimensional models of the floodplain landscape. The Ministry of Natural Resources provided funding to the GRCA to investigate new technology and approaches to complete and update floodplain mapping. This information helped inform GRCA and other Conservation authorities about new technology and approaches to update floodplain mapping, flood hydrology and flood forecasting models. GRCA is working with the US Army Corps of Engineers to adapt their flood hydrology model and flood forecasting framework for application in Ontario and in the Grand River watershed. This new technology will replace the existing flood forecasting model originally developed in the mid 1980's. GRCA is working with the Federal government as part of the network of networks project to share monitoring information in real-time with the Federal government to facilitate improve weather products and documentation of severe events. Documenting severe events and learning from them will be an important part of adapting to climate change. The GRCA Web sites was updated to improve presentation of information to the public. Redundancies and backup communication and power are being

implemented to be prepared for more electrical and communication service disruptions in the future under climate change .

- d) Update GRCA permit policies, procedures and mapping (Ontario Regulation 150/06) - Delegation of permit approvals to staff occurred in June, 2012. The amended regulation was approved by the members in December, 2012.

A number of Regulation 150/06 mapping updates have been completed in the past 5 years. Several updates were prepared in partnership with municipalities through Subwatershed Studies (SWS) and floodplain mapping projects. These include: Cambridge West Master Environmental Servicing Plan (2014), Freeport Creek SWS, North Waterloo SWS (2014), East Side Lands Stage 1 SWS (Region of Waterloo), Moffat Creek, Cambridge (2016), Groff Mill Creek, Cambridge (2016), Central Schneider Creek, Kitchener, (2016), Grand River, Elora and Fergus (2016)

A comprehensive review of the regulation mapping across the watershed occurred in November 2013 and April 2014. This included changes to the regulated features such as floodplain and wetlands. These amendments were based on site specific investigation, with consultation with the landowner or a site specific study undertaken by a qualified professional. A watershed wide project to map watercourses was completed in 2016.

An update to the Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 150/06) was completed in 2013 and 2015.

In 2014 the GRCA initiated an online, web based, application process for landowners applying for a GRCA permit. In 2017, this system has gone through a substantial upgrade to allow landowners to submit their complete application online (application form, payment and plans for the project). Documentation of the new online process will be completed in 2018.

Across the watershed municipal and GRCA Memoranda of Understanding (mou) for Plan Review Services have been updated. These include: City of Hamilton, Haldimand County, Wellington County, City of Brantford, Norfolk County and Township of Southgate. Discussions are ongoing with Region of Waterloo, City of Guelph, County of Oxford and County of Brant to update existing agreements. GRCA does not currently have an agreement with Grey County or Dufferin County. However, services are provided to these areas that are similar to those provided under agreements. The Conservation Authority with the majority of area within a municipality generally leads the review of the agreements. These MOUs outline the roles and responsibilities of the GRCA in the planning process.

- e) Develop a five year forecast for watershed floodplain mapping – The last major national funding program related to flooding, the Flood Damage Reduction Program (FDRP), was initiated in 1975 and ran for 20 years. The GRCA capitalized on the FDRP and was able to substantially advance the understanding and management of floodplains in the watershed, the results of which are still evident today, 30-40 years later. The National

Damage Mitigation Program (NDMP), which commenced in 2014, represents the current major federal initiative geared at defining, understanding, and minimizing the risks associated with flooding. Phase 1 of the NDMP had an initial allocation of \$200 million earmarked for distribution over 5 years. Though not yet specifically announced, it is expected that the program will be extended through additional phases beyond 2019. The NDMP program will contribute up to 50% of an approved project's funding, providing an important opportunity to share the cost of floodplain mapping. A five year forecast for updating floodplain mapping was prepared in June 2017.

Strategic Objective 2 – To Improve Watershed Health:

This objective includes activities to improve surface and ground water quality and quantity through direct and indirect action; to enhance the natural resilience of the watershed by restoring terrestrial and aquatic ecosystems and to ensure natural systems are protected through the municipal planning process.

The challenges in this area are related to the role of the GRCA. With the watershed as a management unit, there is a logical role in water quality for the GRCA, yet other agencies and jurisdictions have been mandated that role. There is an expectation for results in improving water quality, but improvements take time. With the reduction in provincial funding support, the sub-watershed planning process is ad hoc, and often driven by development rather than on a comprehensive basis. The strategic priorities relate to developing long range plans that deal with impacts of climate change, population growth and increasing pressure on the natural environment.

Update on actions to address strategic priorities:

- a) Complete and Implement the Water Management Plan – Implementation of the plan is underway. The goals of the plan are to reduce flood damage potential; ensure water supplies for communities, economies and ecosystems; improve water quality to improve river health and reduce the river's impact on Lake Erie; and increase resiliency to deal with climate change. The plan was developed through a collaborative process. It is based on best value solutions -- the most effective and efficient ways to meet the goals. The partners completed and endorsed the plan in 2014. The plan lists 165 actions the partners have agreed to undertake to meet the goals of the plan. The Water Managers Working Group, consisting of representatives of the partners, meets regularly to review progress and to encourage continued collaboration. An annual Report on Actions is prepared to highlight the accomplishments of the partners. A five year update is scheduled for 2019.
- b) Develop a Watershed Natural Heritage Strategy – A Natural Heritage Strategy for the GRCA was initiated in 2013. The natural heritage framework will:
 - Consolidate existing information and information sources relating to natural heritage features and systems within the watershed,
 - Inform sub-watershed planning and other large-scale conservation initiatives proposed or supported by other organizations,

- Inform park master planning efforts
- Help prioritize and focus ongoing environmental restoration efforts on GRCA land and support voluntary initiatives on rural and/or farm properties,
- Provide information for potential land acquisitions or dispositions
- Support GRCA applications for natural heritage and restoration funding from external sources

The Natural Heritage Framework will complement other GRCA plans and management strategies for water, fisheries, forests, wetlands, and other watershed features. The framework is divided by the eleven major drainage basins in the Grand River watershed and reports have been generated that characterize or summarize the natural heritage features in these basins. These reports have been completed with existing staff resources and with input from external partners such as municipalities, Ministry of Natural Resources and Forestry, Trout Unlimited, Ontario Anglers and Hunters, Grand River Fisheries Management Plan Implementation Committee members.

To date 5 sub-basins have been finalized: Whitemans, McKenzie, Fairchild, Middle Lower Grand and Lower Grand. The 2018 workplan includes completing the characterization reports for the Speed, Conestogo, Upper Middle and Middle Grand (between Shand Dam to Brantford), and Speed sub-basins. The characterization reports for the Nith and Upper Grand are proposed to be completed in 2019.

- c) Consolidate and Update the Components of a Watershed Plan – The GRCA has completed several plans that together form the basis for resource management in the watershed. A brief description of the plans follows.
- The Grand River Fisheries Management Plan was developed in the mid-1990s by the GRCA, the Ministry of Natural Resources and a team of volunteers. The plan has a list of 42 "best bets" - projects with the greatest change of improving the fishery and the overall health of rivers and streams. Still relevant today, the plan partners continue to seek out funding opportunities and implement projects to improve the fisheries in the Grand River and its tributaries.
 - The Source Water Protection Plan The source protection plan for the Grand River watershed came into effect on July 1, 2016. The plan describes the Grand River watershed; identifies the vulnerable areas related to drinking water sources; identifies the types and number of significant threats to water quality and quantity; and outlines the policies and programs to manage or remove significant threats, and to prevent new significant threats from developing. Development of the plan was fully funded by the province.
 - The Water Management Plan was approved in 2014. The goals of the plan are to reduce flood damage potential; ensure water supplies for communities, economies and ecosystems; improve water quality to improve river health and reduce the river's impact on Lake Erie; and increase resiliency to deal with climate change. Each year GRCA prepares a report on actions to achieve the goals of the plan.
 - The Heritage River framework relates to the Grand River's designation as a Canadian Heritage River. The Grand River and its major tributaries - the Conestogo, Eramosa, Nith and Speed rivers - were designated Canadian Heritage

Rivers in 1994. The designation recognizes the outstanding human heritage values and excellent recreational opportunities along the rivers. The designation carries no regulatory or legal authority or restrictions. The designation recognizes the human heritage values and outstanding recreation opportunities in the watershed. Annual reports are submitted to the Canadian Heritage River board, along with ten year monitoring reports in 2004 and 2014.

- The Forest Management Plan was completed in 2004, and remains relevant today. Tree planting is still part of GRCA's annual program, on both private land and GRCA land. An updated Forest Management Plan for 2018-2027 has been completed and was submitted to the Managed Forest Tax Incentive (MFTIP) Program in July. While preparing the MFTIP submission, staff also reviewed and clarified Conservation Land Tax Incentive Program (CLTIP) Eligibility for GRCA properties. Two Hundred and Ninety Eight GRCA properties have some eligible land participating in the MFTIP and/or CLTIP programs. Two hundred properties have eligible MFTIP lands, many of which also contain some CLTIP eligible lands.
- Lake Erie Management is addressed in the water management plan, recognizing the link between activity in the watershed and the nutrient loading to the lake. Nutrient loading to the lake continues to be a major concern, causing impacts like algae blooms and reduced habitat value. Along with several other stakeholders, Conservation Authorities have worked with Federal and Provincial ministries to develop an action plan to reduce phosphorus loading to Lake Erie.

Strategic Objective 3 – To Connect People with the Environment through Outdoor Experiences

This objective includes operating the 11 active conservation areas, managing passive natural areas and providing environmental education opportunities at five Nature Centres. The outdoor education program relies on a few large clients. Increasing demand for access to natural areas can conflict with the goal of protecting the ecological value of those areas. At times, there are conflicting priorities between environmental sustainability, quality, value and financial sustainability.

The strategic priorities relate to long term strategic planning for individual program areas that consider both the importance of protecting the natural environment and prudent financial management.

Update on actions to address strategic priorities:

- a) Update Master Plans for active conservation areas – Business plans were completed for the eleven active conservation areas (parks) in 2012. The plans focus on revenue and expenditures, and capital upgrades required within each of the parks. In 2017 staff developed a five year forecast for capital upgrades. Plans are underway to initiate a review, and update of the business plans.
- b) Implement a Business Plan for sustainable operation of active conservation areas – Business plans have been finalized for all active conservation areas. A five year forecast for capital upgrades at the Conservation Areas was finalized in July 2017. The

forecast identifies and prioritizes capital project in the conservation areas for the 2017 – 2022 period. The capital improvements focus on six key areas: aging infrastructure, washrooms, camping accommodations, automatic entry gates, hiking trails and beach access, and playgrounds.

- c) Complete a passive lands management strategy – A framework is being prepared for completing a passive lands management strategy. The framework will contain the broad principles which will govern the management of all GRCA properties.
- d) Conduct a strategic review of the environmental education program and facilities – This review is underway. Termination of a school board contract occurred in 2012 and discussions on a revised contract are in place. In 2013 work began on implementing new programs and activities in the nature centres. A five year forecast for capital upgrades at the Nature Centres will be completed in 2018. The new Guelph Lake Nature Centre budget for the building is \$2 million. The Grand River Conservation Foundation has secured \$1.57 million in funding to date. Detailed design work is planned for early 2018, with a target construction date of 2020.
- e) Review the Park Reservation System – The GRCA implemented a new reservation system in 2015. The contract with Reservation Dynamics is for a three year term that ends in 2017 but has the option to renew for an additional three, one year terms. The reservation system is the public facing portal for reserving campsites at the eight conservation areas that have nightly camping. The reservation system processed approximately 21,000 reservations each year including those made through the web site, via the call centre and in the park. To date the reservation system has served the public and conservation area staff very well and it has been decided to extend the contract through the 2018 season. The volume of calls handled by the call centre has been steadily dropping over the term of the contract as more people choose to place their reservations on-line. The call centre operation is one aspect of the reservation system that should be reviewed over the next few years
- f) Develop an Emerald Ash Borer strategy to manage hazard tree risks on GRCA property and assess watershed forest health – Staff outlined the GRCA Emerald Ash Borer Strategy in reports in 2013 and 2014. A hazard tree strategy was approved in 2016, and it includes a five year work plan and financial forecast. A report has been submitted to MNRF to requesting approval to use \$1.8 million from reserves for the hazard tree program.

Strategic Objective 4 – To Maintain an Organization with a Focus on Teamwork, Development, and Engagement, and Positive Change:

This objective includes recruiting and retaining a professional workforce; mentoring and developing staff to ensure business continuity while promoting change; fostering cooperation and teamwork throughout the organization; and providing appropriate facilities and technology to enable excellence in performance.

A high number of staff members are reaching eligibility for retirement. There is a need to improve on succession planning and mentoring to prepare a new generation of workers to manage the GRCA. In addition, there is a high degree of dependency on information and technology in the delivery of programs and services at the GRCA. This dependency continues to grow. Priorities in this area recognize that excellence as a service provider depends on well trained, professional staff, experienced with, and committed to working with the public.

Update on actions to address strategic priorities:

- a) Create a mentoring and leadership training program - Supervisors attended a three day course on leadership in 2012. Further leadership training was conducted in 2013, 2014 and 2015. Harvard ManageMentor, an online management training tool, was introduced in 2016 and is available for managers and supervisors. A mentoring program was developed and was quite active from 2013 to 2015. Efforts to revive the program are underway.
- b) Identify and address gaps in documentation processes – The previous strategic plan indicated that an information/file organization strategy would be developed. This process is ongoing. There is a need to develop and document a business continuity plan and to build on the recent investments in the IT disaster recovery strategy. Where employees' retirement dates are known in advance, thorough knowledge transfer programs are implemented. Cross-training on key tasks and for key positions has been a priority, as has increased documentation of processes and projects.
- c) Update Human Resources Policies to address emerging issues – A new Human Resources policy was approved by the members in 2016. Changes to the Employment Standards Act relating to minimum wage and on-call pay have potential to impact GRCA in 2018 and 2019.
- d) Accessibility for Ontarians with Disabilities Act (AODA) - This priority was new to the strategic plan in 2013. A multi-year Accessibility Plan, which outlines the GRCA's strategy to prevent and remove barriers and meet its requirements under this legislation has been prepared and updated accordingly. Capital costs for work required to improve accessibility to GRCA facilities, programs and services will be included in future budget forecasts.

Strategic Objective 5 – To Deliver Value and Innovation to our Watershed Stakeholders:

This objective includes building influential partnerships and relationships; managing a financially sustainable and transparent business and continuously seeking appropriate new business and revenue opportunities. GRCA owns complex, valuable assets with insufficient funds for maintenance. Some assets are undervalued, high risk, and subject to overuse and misuse. The Heritage River designation and partnerships through the International River Foundation are important distinctions that require ongoing management and attention.

Priorities in this area relate to working with the watershed community and various levels of government to re-affirm the value of the GRCA's programs, and to implement programs to ensure that the GRCA is managing its assets in an effective manner.

Update on actions to address strategic priorities:

- a) Enhance the GRCA's relationship with member municipalities through direct, regular communication with municipal councils and senior staff and by supporting GRCA members in their role as liaison to their councils – Budget presentations are prepared for many municipalities each year. Watershed municipalities have been involved in the review of the Conservation Authorities Act.
- b) Build a better understanding of GRCA projects, programs and issues, and the Grand River's designation as a Canadian Heritage River, among provincial and federal decision makers – GRCA has organized two information sessions at Queens' Park for Members of Provincial Parliament. More recently, Conservation Ontario has committed to arrange annual Queen's Park days to highlight the work of Conservation Authorities. GRCA has regular contact with watershed MPPs, and attends the annual AMO conference to meet with various Ministers. Staff have appeared as witnesses at the federal Standing Committee on Environment and Sustainable Development to highlight the role of Conservation Authorities to the federal government. The GRCA submits annual reports on the Heritage River designation to the Ministry of Natural Resources and Forestry and prepared the 10 year summary report for Parks Canada in 2014.
- c) Develop a surplus asset disposition plan – In 2016 GRCA made the strategic decision to wind down the residential tenancy program. A four phase approach was developed, and we are nearing the end of the second phase.
- d) Support municipalities to develop stronger links between their communities, the river system and GRCA conservation areas, and encourage municipalities to improve river-related links (such as trails) between communities. In 2012 GRCA assisted with carrying funds for the Walter Bean Foundation. There is a need to develop a comprehensive plan for GRCA trails, that would outline construction standards for new trails, along with inspection and maintenance standards for existing trails.
- e) Continue to leverage emerging technology and provide appropriate training and support – The use of technology continues to have significant strategic value to GRCA. Geographic Information Systems, remote sensing, and advanced tools for flood forecasting and warning allow us to keep pace with the growing public expectations and manage our workload. GRCA is working with the Province to secure LIDAR mapping for the entire watershed, which will provide high resolution imagery for use in planning and resource management applications. The GRCA website has been re-designed to provide the public with information on GRCA programs and activities including watershed conditions, recreation opportunities, and planning matters.

The Impact of Changes to the Conservation Authorities Act.

Bill 139 – Building Better Communities and Conserving Watersheds Act 2017 proposes changes to the *Conservation Authorities Act* that will have strategic implications for GRCA. The Province’s proposed changes are intended to achieve:

- Clarity in the roles and responsibilities associated with the conservation, restoration, development and management of Ontario’s natural resources.
- Accountability for the fulfillment of these roles and responsibilities and ensuring that decisions are made in accordance with modern expectations for participation and transparency in decision-making. Conservation Authorities will have one year to adopt By-laws that meet specific requirements for governance Best Management Practices.
- Sustainability in funding for the programs and services put in place to ensure Ontario’s natural resources are managed in a responsible manner.
- A modernized policy framework that enables the province to be responsive to the resource management challenges of today and tomorrow.

Process for Updating the Strategic Plan

The changes to the Conservation Authorities Act will provide a starting point for reviewing and updating the GRCA strategic plan. In 2017, the GRCA retained a consulting firm to carry out an organization-wide review of the GRCA’s and Foundation’s Communications and Marketing Programs. Public input was solicited as part of the research undertaken, which will provide some valuable insight into the public’s expectations of the GRCA. The findings of the review will be shared with the board at a later date. In 2018, staff will arrange for a facilitated working session with the board on the strategic plan.

Prepared by:

Joe Farwell, P.Eng.

Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-17-133

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Report of the Audit Committee

Recommendation:

THAT the report of the Audit Committee be received for information.

Summary:

Not required.

Report:

The Audit Committee met on November 24, 2017. The Grand River Conservation Authority's auditors, KPMG, presented the 2017 Audit Plan.

The following Resolution was passed by the Audit Committee:

AUD-2017-10

Moved By Jane Mitchell

Seconded By David Neumann

THAT the Audit Plan for the year ending December 31, 2017, proposed by KPMG be approved.

Carried

Financial implications:

Not applicable

Other department considerations:

Not applicable

Prepared by:

Keith Murch
Secretary Treasurer

Approved by:

Joe Farwell
CAO

Grand River Conservation Authority

Report number: GM-12-17-134

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Cash and Investments Status Report as of November 30, 2017

Recommendation:

THAT Report GM-12-17-134 – Cash and Investments Status Report as of November 30, 2017 be received as information.

Summary:

The cash position including Notes Receivable of the Grand River Conservation Authority as at November 30, 2017 was \$30,004,319 with outstanding cheques written in the amount of \$169,763.

Report:

Attached.

Financial implications:

Interest rates, etc. are shown on the report.

Other department considerations:

Not applicable.

Prepared by:

Carol Anne Johnston
Senior Accountant

Sonja Radoja
Manager of Corporate Services

Approved by:

Keith Murch
Assistant CAO/Secretary Treasurer

**Grand River Conservation Authority
Cash and Investments Status Report
November 30, 2017**

| Date Invested | Location | Type | Amount | Rate | Maturity | 2017 |
|----------------------|----------------------------|------------------|---------------|-------------|------------------------------|-------------|
| | C.I.B.C. | Current Account | 3,132,602 | 1.8% | Below Average Prime or 1.40% | |
| | Wood Gundy | Current Account | 0 | 0.20% | | |
| | C.I.B.C. | Property Account | 6,515 | 1.8% | Below Average Prime or 1.40% | |
| | C.I.B.C. | SPP Account | 919,854 | 1.8% | Below Average Prime or 1.40% | |
| | C.I.B.C. | U.S. | 2,762 | | | |
| | C.I.B.C. | PayPal Account | 15,968 | 1.8% | Below Average Prime or 1.40% | |
| | C.I.B.C. | Call Centre | 24,350 | 1.8% | Below Average Prime or 1.40% | |
| | Royal Bank | Conestogo | 46,778 | | | |
| | Royal Bank | Brant | 76,976 | | | |
| | Royal Bank | Luther | 32,476 | | | |
| | | | 4,258,281 | | | |
| September 9, 2009 | CIBC Renaissance | Account | 2,412,635 | 0.95% | | 3,830 |
| October 1, 2014 | CIBC Trust Savings | Account | 2,207,751 | 0.95% | | 3,505 |
| July 15, 2016 | One Investment Savings | Account | 4,058,606 | 1.67% | | 11,293 |
| June 6, 2013 | Royal Bank | Bond | 1,000,000 | 2.26% | March 12, 2018 | 6,479 |
| November 7, 2013 | Bank of Montreal | Bond | 1,746,000 | 2.24% | December 11, 2017 | 19,654 |
| May 5, 2014 | Royal Bank | Bond | 987,000 | 2.26% | March 12, 2018 | 5,949 |
| December 8, 2014 | Laurentian Bank | Bond | 1,578,000 | 2.81% | June 13, 2019 | 20,508 |
| January 28, 2015 | CIBC | Bond | 726,046 | 1.80% | May 15, 2019 | 13,069 |
| September 3, 2015 | CIBC | Bond | 2,000,000 | 2.25% | September 3, 2025 | 14,671 |
| October 14, 2015 | Laurentian Bank | Bond | 1,996,000 | 2.50% | January 23, 2020 | 27,365 |
| March 1, 2016 | CIBC | Bond | 1,300,000 | 1.70% | March 1, 2023 | 7,542 |
| September 16, 2016 | CIBC | Bond | 1,184,000 | 1.30% | March 13, 2020 | 4,597 |
| August 24, 2017 | Royal Bank | Bond | 1,000,000 | 2.82% | July 12, 2018 | 4,913 |
| August 24, 2017 | Bank of Montreal | Bond | 1,550,000 | 1.61% | October 28, 2021 | 5,463 |
| October 2, 2017 | CIBC | Bond | 2,000,000 | 1.70% | October 9, 2018 | 7,413 |
| | Total G.R.C.A. Investments | | 25,746,038 | | | 156,252 |
| | G.R.C.A. Funds | | 30,004,319 | | | |
| | Outstanding Cheques | | 169,763 | | | |

Investment By Category and Institution

| | <u>% of Total Portfolio</u> | | <u>% of Total Portfolio</u> |
|------------|-----------------------------|------------------------|-----------------------------|
| Government | 0% | Gov't of Canada | 0% |
| | | Province of Ontario | 0% |
| Banks | 84% | C.I.B.C. | 46% |
| | | Bank of Nova Scotia | 0% |
| | | Bank of Montreal | 13% |
| | | Royal Bank | 12% |
| | | Toronto Dominion | 0% |
| | | National | 0% |
| | | Laurentian | 14% |
| Other | 16% | One Investment Program | 16% |

Grand River Conservation Authority

Report number: GM-12-17-137

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Financial Summary for the Period Ending November 30, 2017

Recommendation:

THAT the Financial Summary for the period ending November 30, 2017 be approved.

Summary:

The Financial Summary includes the 2017 *actual* income and expenditures. The budget approved at the February 24, 2017 General Meeting is included in the *Budget* column. The *Current Forecast* column will indicate an estimate of income and expenditures for the whole year. Any changes between the *Current Forecast* and the *Previous Forecast* will be discussed during the meeting. At this time a surplus of \$310,500 at year-end is anticipated.

Report:

The Financial Summary is attached.

- A. Total Revenue decreased by \$149,000.
 - Municipal Revenue increased by \$75,000
 - Schedule 6 - Other Municipal funding for RWQP Grants to Landowners increased by \$75,000 due to increased activity.
 - Government Grants decreased by \$450,000
 - Schedule 16 - Funding from MNR for the Source Protection Program decreased by \$450,000. Expenses also decreased.
 - Self-Generated Revenue increased by \$226,000
 - Schedule 4 – Resource Planning income increased \$5,000 for Solicitor Enquiry Fees and \$45,000 for Plan Review Fees.
 - Schedule 13 – Conservation Area Fee Revenue increased by \$75,000 due to increased activity and Foundation funding increased by \$40,000 related mainly to winter program expenses at Pinehurst CA (Toyota Funding).
 - Schedule 11 – Property Rental income increased by \$5,000 for Cottage Lot revenue, \$3,000 for Agricultural land leases, and \$13,000 for residential rental income. Residential rental income higher than budget due to timing of departure of tenants.
 - Schedule 9 – Corporate Services Miscellaneous income increased \$25,000 due to consulting services provided to Conservation Ontario (By-Laws project).
 - Schedule 14 – Miscellaneous income increased by \$15,000 for Insurance claim on the Everton Mill Fire. Budget included \$35,000

recovery provision whereas \$50,000 in insurance proceeds is forecast.

- B. Total Expenditures decreased by \$273,000.
- Operating Expenses increased by \$76,000.
 - Schedule 7 – Communications expenses decreased by \$35,000. The \$35,000 decrease represents decrease in printed literature expenses of \$50,000 due to decision to not publish The Grand newspaper insert, which was offset partially by increase of \$15,000 for compensation and benefit expenses, due to reallocation of communications staff time from the Foundation to the communications department.
 - Schedule 9 – Corporate Services consulting expenses reduced by \$60,000 due to deferral of file management project to 2018.
 - Schedule 11 – Property Rentals expenses increased by \$21,000 due to \$31,000 higher property taxes as a result of the timing of departure of residential tenants offset by \$10,000 reduction to repairs and maintenance expenses.
 - Schedule 13 – Conservation Area expenses increased by \$115,000 which represents a \$75,000 increase for compensation and benefits due to increased activity and \$40,000 increase for winter program expenses funded by Foundation.
 - Schedule 14 – Miscellaneous expenses increased by \$35,000 related to costs for property damage. Higher budgeted costs driven by Everton Mill fire for which insurance proceeds are also applicable.
 - Schedule 16 – Motor Pool fuel costs reduced by \$50,000 offset by \$50,000 reduction in budgeted Motor Pool charges.
 - Capital Expenses decreased by \$40,000
 - Schedule 2 – Flood Forecasting and Warning expenses decreased by \$40,000 related to less spending on Stream Gauges. Unspent municipal capital levy to be placed in the Gauge reserve.
 - Special Project Expenses decreased by \$309,000
 - Schedule 6 – Conservation Services expenses increased by \$75,000 due to increase in RWQP grants to landowners.
 - Schedule 10-Conservation Lands expenses increased by \$66,000 due to \$60,000 in expenses related to preparing lands for sale and \$6,000 for land acquisition expenses. These expenses are funded by the land sale proceeds reserve.
 - Schedule 15 – Source Protection Program expenses decreased by \$450,000 due to \$400,000 deferral of Water budget technical studies and \$50,000 less on compensation and benefits due to level of activity.
- C. Net Funding from Reserves increased by \$26,000.
- Funding to Gauge reserve increased by \$40,000. Unspent municipal capital levy related to stream gauge purchases transferred to reserve.
 - Funding from Land Sales Proceeds reserve increased by \$66,000 related to funding for land sales and purchases.

Financial implications:

The activity summarized will result in a \$310,500 surplus at December 31, 2017.

Other department considerations:

The management committee and appropriate supervisory staff receive monthly financial reports and advise the finance department of applicable forecast adjustments.

Prepared by:

Sonja Radoja
Manager Corporate Services

Approved by:

Keith Murch
Assistant CAO/Secretary-Treasurer

GRAND RIVER CONSERVATION AUTHORITY
FINANCIAL SUMMARY - FORECAST
 General Membership December 15, 2017

FORECAST - OCTOBER 30, 2017- NET RESULT

\$160,500

CHANGES - November 2017

| | | | |
|--------|-------------------------------|---|------------|
| Sch 2 | Flood Forecasting and Warning | \$40,000 Stream Gauge Capital Expenses decreased (\$40,000) Funding to Gauge Reserve increased | \$0 |
| Sch 4 | Resource Planning | \$45,000 Plan Review Fee Revenue increased \$5,000 Solicitor Enquiry Fee Revenue increased | \$50,000 |
| Sch 6 | Conservation Services | (\$75,000) RWQPGrants Expense increased \$75,000 Other Municipal Funding increased | \$0 |
| Sch 7 | Communications | \$50,000 Printed Literature Expenses decreased (\$15,000) Compensation and Benefit Expenses increased | \$35,000 |
| Sch 9 | Corporate Services | \$60,000 Consulting Expense decreased (project deferred to 2018) \$25,000 Miscellaneous Income increased | \$85,000 |
| Sch 10 | Conservation Lands | \$6,000 Land Purchase Expenses increased \$60,000 Land Sale Expenses increased (\$66,000) Funding from Land Sale Reserve increased | \$0 |
| Sch 11 | Property Rentals | \$13,000 Residential Rental Income Increased \$3,000 Agricultural Income increased \$5,000 Belwood Cottage Lot Income increased (\$31,000) Property Taxes Increased \$10,000 Repairs and Maintenance Expenses decreased | \$0 |
| Sch 13 | Conservation Areas | (\$40,000) Conservation Area Operating Expenses increased \$40,000 Foundation Funding increased (\$75,000) Compensation and Benefit Expenses increased \$75,000 Conservation Area Revenue increased (\$8,400,000 to \$8,475,000) | \$0 |
| Sch 14 | Miscellaneous | (\$35,000) Non-Insured Loss Expenses increased \$15,000 Misc Income (Insurance Claim Proceeds) increased | (\$20,000) |
| Sch 15 | Source Protection Program | \$400,000 Water Budget Technical Studies Expense decreased \$50,000 Compensation and Benefit Expense decreased (\$450,000) Provincial Funding decreased | \$0 |
| Sch 16 | Motor Pool | \$50,000 Fuel Expenses decreased (\$50,000) Funding from Motor Pool Charges decreased | \$0 |

FORECAST - NOVEMBER 30, 2017- NET RESULT

\$310,500

**GRAND RIVER CONSERVATION AUTHORITY
STATEMENT OF OPERATIONS
FOR THE PERIOD ENDING November 30, 2017**

| SCHEDULE | | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---------------------------------------|---------|-------------------|-------------------|-------------------|----------------------|---------------------|--------------------|
| REVENUE | | | | | | | |
| Municipal | | | | | | | |
| General Municipal Levy (Operating) | various | 9,809,000 | 10,025,000 | 10,025,000 | 10,025,000 | 10,025,000 | 0 |
| General Municipal Levy (Capital) | various | 1,000,000 | 1,050,000 | 1,050,000 | 1,050,000 | 1,050,000 | 0 |
| Special Municipal Levy | various | 113,499 | 150,000 | 18,486 | 150,000 | 150,000 | 0 |
| Other | various | 977,680 | 800,000 | 1,561,862 | 855,000 | 930,000 | 75,000 |
| | | 11,900,179 | 12,025,000 | 12,655,348 | 12,080,000 | 12,155,000 | 75,000 |
| Government Grants | | | | | | | |
| MNRF Transfer Payments | various | 871,073 | 871,073 | 871,073 | 871,073 | 871,073 | 0 |
| Source Protection Program-Provincial | various | 1,159,446 | 835,000 | 1,316,626 | 1,970,000 | 1,520,000 | (450,000) |
| Other Provincial | various | 955,572 | 1,147,500 | 1,706,769 | 962,500 | 962,500 | 0 |
| Federal | various | 187,159 | 289,500 | 422,108 | 349,500 | 349,500 | 0 |
| | | 3,173,250 | 3,143,073 | 4,316,576 | 4,153,073 | 3,703,073 | (450,000) |
| Self Generated | | | | | | | |
| User Fees and Sales | | | | | | | |
| <i>Enquiries and Permits</i> | 4 | 511,202 | 428,500 | 471,677 | 468,500 | 473,500 | 5,000 |
| <i>Plan Input and Review</i> | 4 | 411,561 | 398,000 | 443,312 | 398,000 | 443,000 | 45,000 |
| <i>Nursery and Woodlot Management</i> | 5 | 502,611 | 515,000 | 435,045 | 465,000 | 465,000 | 0 |
| <i>Consulting</i> | 4 | 0 | 0 | 3,726 | 0 | 0 | 0 |
| <i>Conservation Lands Income</i> | 10 | 59,091 | 71,000 | 47,554 | 71,000 | 71,000 | 0 |
| <i>Conservation Areas User Fees</i> | 13 | 8,533,069 | 7,300,000 | 8,468,779 | 8,400,000 | 8,475,000 | 75,000 |
| <i>Nature Centres and Camps</i> | 8 | 876,797 | 876,500 | 808,310 | 901,500 | 901,500 | 0 |
| <i>Merchandising and Sales</i> | 8 | 3,647 | 0 | 1,055 | 0 | 0 | 0 |
| Property Rentals | 11 | 3,082,548 | 2,929,700 | 2,865,005 | 2,929,700 | 2,950,700 | 21,000 |
| Hydro Generation | 12 | 487,033 | 470,000 | 472,512 | 470,000 | 470,000 | 0 |
| Land Sales | 10 | 408,750 | 0 | 0 | 0 | 0 | 0 |
| Grand River Conservation Foundation | various | 676,104 | 559,500 | 489,473 | 579,500 | 619,500 | 40,000 |
| Donations | various | 126,728 | 244,000 | 304,572 | 244,000 | 244,000 | 0 |
| Landowner Contributions | 5 | 193,448 | 300,000 | 201,761 | 200,000 | 200,000 | 0 |
| Investment Income | 14 | 443,137 | 450,000 | 286,642 | 450,000 | 450,000 | 0 |
| Miscellaneous Income | various | 55,333 | 48,000 | 42,320 | 48,000 | 88,000 | 40,000 |
| Total Self-Generated Revenue | | 16,371,059 | 14,590,200 | 15,341,743 | 15,625,200 | 15,851,200 | 226,000 |
| TOTAL REVENUE | | 31,444,488 | 29,758,273 | 32,313,667 | 31,858,273 | 31,709,273 | (149,000) |

**GRAND RIVER CONSERVATION AUTHORITY
STATEMENT OF OPERATIONS
FOR THE PERIOD ENDING November 30, 2017**

| SCHEDULE | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change | |
|---|----------------|--------------------|-------------------|----------------------|---------------------|--------------------|------------------|
| EXPENSES | | | | | | | |
| OPERATING | | | | | | | |
| Water Resources Planning & Environment | 1 | 1,908,913 | 2,181,300 | 1,771,066 | 2,131,300 | 2,131,300 | 0 |
| Flood Forecasting and Warning | 2 | 692,104 | 780,300 | 675,053 | 780,300 | 780,300 | 0 |
| Water Control Structures | 3 | 1,570,819 | 1,678,900 | 1,433,813 | 1,678,900 | 1,678,900 | 0 |
| Resource Planning | 4 | 1,796,981 | 1,922,900 | 1,666,516 | 1,892,900 | 1,892,900 | 0 |
| Forestry & Conservation Land Property Taxes | 5 | 1,305,453 | 1,489,700 | 1,284,838 | 1,339,700 | 1,339,700 | 0 |
| Conservation Services | 6 | 758,769 | 837,500 | 711,248 | 807,500 | 807,500 | 0 |
| Communications & Foundation | 7 | 598,583 | 676,900 | 559,917 | 676,900 | 641,900 | (35,000) |
| Environmental Education | 8 | 1,224,383 | 1,245,800 | 1,186,933 | 1,268,300 | 1,268,300 | 0 |
| Corporate Services | 9 | 2,882,470 | 3,244,705 | 2,700,557 | 3,236,705 | 3,176,705 | (60,000) |
| Conservation Lands | 10 | 1,980,934 | 1,926,200 | 1,558,519 | 1,842,200 | 1,842,200 | 0 |
| Property Rentals | 11 | 1,766,373 | 1,797,900 | 1,642,961 | 1,996,900 | 2,017,900 | 21,000 |
| Hydro Production | 12 | 211,224 | 65,000 | 155,518 | 165,000 | 165,000 | 0 |
| Conservation Areas | 13 | 6,671,933 | 6,550,000 | 6,547,050 | 6,850,000 | 6,965,000 | 115,000 |
| Miscellaneous | 14 | 45,814 | 70,000 | 105,775 | 70,000 | 105,000 | 35,000 |
| Information Systems | 16 | 1,071,038 | 1,105,000 | 1,020,030 | 1,105,000 | 1,105,000 | 0 |
| Motor Pool | 16 | 802,874 | 888,400 | 703,988 | 881,900 | 831,900 | (50,000) |
| Less: Internal Charges (IS & MP) | 16 | (1,873,912) | (1,993,400) | (1,724,018) | (1,993,400) | (1,943,400) | 50,000 |
| Total OPERATING Expenses | | 23,414,753 | 24,467,105 | 21,999,764 | 24,730,105 | 24,806,105 | 76,000 |
| CAPITAL | | | | | | | |
| Water Resources Planning & Environment | 1 | 52,167 | 110,000 | 72,927 | 110,000 | 110,000 | 0 |
| Flood Forecasting and Warning | 2 | 119,443 | 190,000 | 121,511 | 190,000 | 150,000 | (40,000) |
| Water Control Structures | 3 | 1,044,865 | 1,500,000 | 544,841 | 1,100,000 | 1,100,000 | 0 |
| Nature Centres | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Conservation Areas | 13 | 771,510 | 683,000 | 705,352 | 985,000 | 985,000 | 0 |
| Corporate Services | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| Information Systems | 16 | 178,349 | 250,000 | 203,763 | 250,000 | 250,000 | 0 |
| Motor Pool | 16 | 348,660 | 300,000 | 145,985 | 300,000 | 300,000 | 0 |
| Less: Internal Charges (IS & MP) | 16 | (478,902) | (369,600) | (603,633) | (369,600) | (369,600) | 0 |
| Total Capital Expenses | | 2,036,092 | 2,663,400 | 1,190,746 | 2,565,400 | 2,525,400 | (40,000) |
| SPECIAL | | | | | | | |
| Water Resources Planning & Environment | 1 | 301,587 | 203,000 | 225,892 | 298,000 | 298,000 | 0 |
| Flood Forecasting and Warning | 2 | 170,975 | 200,000 | 96,687 | 200,000 | 200,000 | 0 |
| Forestry | 5 | 80,614 | 200,000 | 231,671 | 200,000 | 200,000 | 0 |
| Conservation Services | 6 | 1,154,929 | 983,000 | 1,074,545 | 1,008,000 | 1,083,000 | 75,000 |
| Communications | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental Education | 8 | 262,426 | 220,000 | 257,566 | 240,000 | 240,000 | 0 |
| Conservation Land Purchases | 10 | 67,239 | 0 | 126,215 | 60,000 | 126,000 | 66,000 |
| Conservation Lands | 10 | 396,830 | 587,000 | 372,374 | 587,000 | 587,000 | 0 |
| Property Development | 11 | 0 | 50,000 | 0 | 50,000 | 50,000 | 0 |
| Hydro Generation | 12 | 0 | 200,000 | 73,005 | 200,000 | 200,000 | 0 |
| Miscellaneous | 14 | 29,824 | 35,000 | 28,890 | 35,000 | 35,000 | 0 |
| Source Protection Program | 15 | 1,159,446 | 835,000 | 1,316,626 | 1,970,000 | 1,520,000 | (450,000) |
| Total SPECIAL PROJECTS Expenses | | 3,623,870 | 3,513,000 | 3,803,471 | 4,848,000 | 4,539,000 | (309,000) |
| Total Expenses | | 29,074,715 | 30,643,505 | 26,993,981 | 32,143,505 | 31,870,505 | (273,000) |
| Gross Surplus | | 2,369,773 | (885,232) | 5,319,686 | (285,232) | (161,232) | 124,000 |
| Prior Year Surplus Carryforward | | 429,618 | 315,832 | 315,832 | 315,832 | 315,832 | 0 |
| Net Funding FROM/(TO) Reserves | | (2,483,559) | 569,400 | 0 | 129,900 | 155,900 | 26,000 |
| NET SURPLUS | | 315,832 | 0 | 5,635,518 | 160,500 | 310,500 | 150,000 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 1 - Water Resources - Planning and Environment
FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---|------------------------|------------------------|-----------------------|------------------------------|-----------------------------|----------------------------|
| Compensation and Benefits | 1,353,773 | 1,541,600 | 1,271,749 | 1,501,600 | 1,501,600 | |
| Administration Expenses | 268,994 | 306,900 | 241,609 | 306,900 | 306,900 | |
| Insurance Expenses | 124,652 | 126,000 | 115,267 | 116,000 | 116,000 | |
| Other Operating Expenses | 161,494 | 206,800 | 142,441 | 206,800 | 206,800 | |
| Total OPERATING Expenditures | 1,908,913 | 2,181,300 | 1,771,066 | 2,131,300 | 2,131,300 | |
| Instrumentation | 37,320 | 60,000 | 30,783 | 60,000 | 60,000 | |
| Water Quality Monitoring Equipment | 14,847 | 50,000 | 42,144 | 50,000 | 50,000 | |
| Total CAPITAL Expenditures | 52,167 | 110,000 | 72,927 | 110,000 | 110,000 | |
| Grand River Water Management Plan | 82,410 | 20,000 | 20,513 | 20,000 | 20,000 | |
| Dundas Valley Groundwater | 763 | 0 | 0 | 0 | 0 | |
| Upper Blair Drainage | 100,294 | 100,000 | 87,469 | 100,000 | 100,000 | |
| Large Cover Placement Project | 0 | 0 | 0 | 0 | 0 | |
| Natural Heritage Study-Wellington | 0 | 0 | 21,674 | 55,000 | 55,000 | |
| Sprecies at Risk -SARA | 0 | 0 | 0 | 15,000 | 15,000 | |
| Waste Water Optimization Program | 118,120 | 83,000 | 96,236 | 108,000 | 108,000 | |
| Drought Contingency Pilot Project | 0 | 0 | 0 | 0 | 0 | |
| Total SPECIAL PROJECT Expenditures | 301,587 | 203,000 | 225,892 | 298,000 | 298,000 | |
| Grand River Watershed Management Plan | 20,000 | 0 | 0 | 0 | 0 | |
| Planning Enforcement | 0 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 20,000 | 0 | 0 | 0 | 0 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 2,282,667 | 2,494,300 | 2,069,885 | 2,539,300 | 2,539,300 | 0 |
| Funding | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 1,981,700 | 2,030,600 | 2,030,600 | 2,030,600 | 2,030,600 | |
| General Municipal Levy (Captial) | 10,000 | 60,000 | 60,000.00 | 60,000 | 60,000 | |
| Special Levies | 113,499 | 150,000 | 18,486 | 150,000 | 150,000 | |
| Municipal Other | 26,534 | 0 | 0 | 55,000 | 55,000 | |
| Government Grants | | | | | | |
| MNRF Transfer Payments | 33,200 | 33,200 | 33,200 | 33,200 | 33,200 | |
| Other Provincial | 188,050 | 140,500 | 483,850 | 165,500 | 165,500 | |
| Federal | 22,410 | 0 | 22,831 | 15,000 | 15,000 | |
| Self Generated | | | | | | |
| Donations Other | 0 | 3,000 | 0 | 3,000 | 3,000 | |
| Funding From Reserves | | | | | | |
| Grand River Watershed Management Plan | 0 | 27,000 | 0 | 27,000 | 27,000 | |
| Gauges | 0 | 50,000 | 0 | 50,000 | 50,000 | |
| TOTAL FUNDING | 2,375,393 | 2,494,300 | 2,648,967 | 2,589,300 | 2,589,300 | 0 |
| Net Surplus/(Deficit) | 92,726 | 0 | 579,082 | 50,000 | 50,000 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 2 - Flood Forecasting and Warning
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 387,398 | 449,700 | 367,703 | 449,700 | 449,700 | |
| Administration Expenses | 244,714 | 255,700 | 245,752 | 255,700 | 255,700 | |
| Other Operating Expenses | 59,992 | 74,900 | 61,598 | 74,900 | 74,900 | |
| Total OPERATING Expenditures | 692,104 | 780,300 | 675,053 | 780,300 | 780,300 | |
| Hardware | 81,180 | 88,000 | 75,134 | 88,000 | 88,000 | |
| Stream Gauges | 38,263 | 102,000 | 46,377 | 102,000 | 62,000 | (40,000) |
| Total CAPITAL Expenditures | 119,443 | 190,000 | 121,511 | 190,000 | 150,000 | (40,000) |
| Floodplain Mapping Projects | 170,975 | 200,000 | 96,687 | 200,000 | 200,000 | |
| Total SPECIAL PROJECT Expenditures | 170,975 | 200,000 | 96,687 | 200,000 | 200,000 | |
| Total FUNDING to RESERVES | 70,000 | 0 | 0 | 0 | 40,000 | 40,000 |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,052,522 | 1,170,300 | 893,251 | 1,170,300 | 1,170,300 | 0 |
| Funding | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 507,745 | 527,345 | 527,345 | 527,345 | 527,345 | |
| General Municipal Levy (Capital) | 190,000 | 190,000 | 190,000 | 190,000 | 190,000 | |
| Municipal Other | | | | | | |
| Government Grants | | | | | | |
| MNRF Transfer Payments | 252,955 | 252,955 | 252,955 | 252,955 | 252,955 | |
| Other Provincial | 170,975 | 200,000 | 378,286 | 200,000 | 200,000 | |
| TOTAL REVENUE | 1,121,675 | 1,170,300 | 1,348,586 | 1,170,300 | 1,170,300 | 0 |
| Net Surplus/(Deficit) | 69,153 | 0 | 455,335 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 3 - Water Control Structures
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 1,067,474 | 1,136,000 | 1,005,401 | 1,136,000 | 1,136,000 | |
| Administration Expenses | 16,997 | 28,000 | 12,736 | 28,000 | 28,000 | |
| Property Taxes | 180,221 | 183,500 | 164,570 | 183,500 | 183,500 | |
| Other Operating Expenses | 306,127 | 331,400 | 251,106 | 331,400 | 331,400 | |
| Total OPERATING Expenditures | 1,570,819 | 1,678,900 | 1,433,813 | 1,678,900 | 1,678,900 | |
| Total CAPITAL Expenditures | 1,044,865 | 1,500,000 | 544,841 | 1,100,000 | 1,100,000 | |
| Total FUNDING to RESERVES | 314,000 | 0 | 0 | 200,000 | 200,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 2,929,684 | 3,178,900 | 1,978,654 | 2,978,900 | 2,978,900 | 0 |
| Funding | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 1,287,050 | 1,278,550 | 1,278,550 | 1,278,550 | 1,278,550 | |
| General Municipal Levy (Capital) | 800,000 | 800,000 | 800,000 | 800,000 | 800,000 | |
| Government Grants | | | | | | |
| MNRF Transfer Payments | 400,350 | 400,350 | 400,350 | 400,350 | 400,350 | |
| Provincial | 442,724 | 700,000 | 689,511 | 500,000 | 500,000 | |
| Self Generated | | | | | | |
| Miscellaneous | 0 | 0 | 0 | 0 | 0 | |
| TOTAL REVENUE AND FUNDING FROM RESERVES | 2,930,124 | 3,178,900 | 3,168,411 | 2,978,900 | 2,978,900 | 0 |
| Net Surplus/(Deficit) | 440 | 0 | 1,189,757 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 4 - Resource Planning
 FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| <u>Expenditures and Funding to Reserves</u> | | | | | | |
| Compensation and Benefits | 1,547,162 | 1,656,500 | 1,415,074 | 1,626,500 | 1,626,500 | |
| Administration Expenses | 193,047 | 213,800 | 191,884 | 213,800 | 213,800 | |
| Other Operating Expenses | 56,772 | 52,600 | 59,558 | 52,600 | 52,600 | |
| Total OPERATING Expenditures | 1,796,981 | 1,922,900 | 1,666,516 | 1,892,900 | 1,892,900 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,796,981 | 1,922,900 | 1,666,516 | 1,892,900 | 1,892,900 | 0 |
| <u>Funding</u> | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 1,001,132 | 981,832 | 981,832 | 981,832 | 981,832 | |
| Government Grants | | | | | | |
| MNRF Transfer Payments | 114,568 | 114,568 | 114,568 | 114,568 | 114,568 | |
| Other Provincial | 22 | 0 | 9,964 | 0 | 0 | |
| Self Generated | | | | | | |
| Solicitor Enquiry Fees | 64,935 | 50,500 | 55,265 | 50,500 | 55,500 | 5,000 |
| Permit Fees | 446,267 | 378,000 | 416,412 | 418,000 | 418,000 | 0 |
| Plan Review Fees | 411,561 | 398,000 | 443,312 | 398,000 | 443,000 | 45,000 |
| Consulting | 0 | 0 | 3,726 | 0 | 0 | |
| TOTAL REVENUE | 2,038,485 | 1,922,900 | 2,025,079 | 1,962,900 | 2,012,900 | 50,000 |
| Net Surplus/(Deficit) | 241,504 | 0 | 358,563 | 70,000 | 120,000 | 50,000 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 5 - Forestry & Conservation Lands Property Taxes
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------------|------------------------|-----------------------|------------------------------|-----------------------------|----------------------------|
| How much does it cost, and who pays for it? | | | | | | |
| <u>Expenditures and Funding to Reserves</u> | | | | | | |
| Compensation and Benefits | 538,843 | 524,200 | 543,189 | 524,200 | 524,200 | |
| Administration Expenses | 54,914 | 42,500 | 55,041 | 42,500 | 42,500 | |
| Property Taxes | 160,690 | 172,600 | 169,638 | 172,600 | 172,600 | |
| Other Operating Expenses | 551,006 | 750,400 | 516,970 | 600,400 | 600,400 | |
| Total OPERATING Expenditures | 1,305,453 | 1,489,700 | 1,284,838 | 1,339,700 | 1,339,700 | |
| Ecological Restoration | 80,614 | 200,000 | 231,671 | 200,000 | 200,000 | |
| Total SPECIAL PROJECT Expenditures | 80,614 | 200,000 | 231,671 | 200,000 | 200,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,386,067 | 1,689,700 | 1,516,509 | 1,539,700 | 1,539,700 | 0 |
| <u>Funding</u> | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 626,300 | 632,700 | 632,700 | 632,700 | 632,700 | |
| Municipal Other | | | | | | |
| Government Grants | | | | | | |
| Provincial | 0 | 0 | 1,522 | 0 | 0 | |
| Federal | 1,839 | 0 | 73,562 | 0 | 0 | |
| Self Generated | | | | | | |
| Nursery | 433,051 | 500,000 | 432,826 | 450,000 | 450,000 | |
| Landowner Contributions (Tree Planting) | 193,448 | 300,000 | 201,761 | 200,000 | 200,000 | |
| Donations - Foundation | 68,311 | 57,000 | 3,425 | 57,000 | 57,000 | |
| Donations - Other | 52,308 | 200,000 | 283,138 | 200,000 | 200,000 | |
| TOTAL REVENUE | 1,375,257 | 1,689,700 | 1,628,934 | 1,539,700 | 1,539,700 | 0 |
| Net Surplus/(Deficit) | (10,810) | 0 | 112,425 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 6 - Conservation Services
FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| Compensation and Benefits | 645,561 | 672,900 | 591,611 | 672,900 | 672,900 | |
| Administration Expenses | 97,208 | 107,800 | 94,138 | 107,800 | 107,800 | |
| Other Operating Expenses | 16,000 | 56,800 | 25,499 | 26,800 | 26,800 | |
| Total OPERATING Expenditures | 758,769 | 837,500 | 711,248 | 807,500 | 807,500 | |
| RWQP Grants | 943,635 | 800,000 | 856,007 | 800,000 | 875,000 | 75,000 |
| Brant/Brantford Childrens Water Festival | 24,514 | 26,000 | 20,544 | 26,000 | 26,000 | |
| Haldimand Childrens Water Festival | 23,188 | 20,000 | 26,376 | 20,000 | 20,000 | |
| Species at Risk | 70,751 | 60,000 | 59,199 | 60,000 | 60,000 | |
| AGGP-UofG Research-Buffers | 0 | 0 | 18,812 | 25,000 | 25,000 | |
| Great Lakes SHSM Event | 13,265 | 0 | 6,076 | 0 | 0 | |
| Great Lakes Agricultural Stewardship Initiative | 79,576 | 77,000 | 87,531 | 77,000 | 77,000 | |
| Total SPECIAL PROJECT Expenditures | 1,154,929 | 983,000 | 1,074,545 | 1,008,000 | 1,083,000 | 75,000 |
| Total FUNDING to RESERVES | 17,000 | 0 | 0 | 0 | 0 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,930,698 | 1,820,500 | 1,785,793 | 1,815,500 | 1,890,500 | 75,000 |

Funding

Municipal

| | | | | | | |
|------------------------------------|---------|---------|-----------|---------|---------|--------|
| General Municipal Levy (Operating) | 666,700 | 689,500 | 689,500 | 689,500 | 689,500 | |
| Municipal Other | 943,636 | 800,000 | 1,561,862 | 800,000 | 875,000 | 75,000 |

Government Grants

| | | | | | | |
|------------------|---------|---------|---------|--------|--------|--|
| Other Provincial | 107,410 | 107,000 | 127,455 | 97,000 | 97,000 | |
| Federal | 70,751 | 60,000 | 245,685 | 85,000 | 85,000 | |

Self Generated

| | | | | | | |
|------------------------|---------|---------|---------|---------|---------|--|
| Donations - Foundation | 128,009 | 107,000 | 110,497 | 107,000 | 107,000 | |
| Donations - Other | 19,900 | 26,000 | 21,434 | 26,000 | 26,000 | |
| Miscellaneous | 873 | 0 | 12,357 | 0 | 0 | |

Funding From Reserves

| | | | | | | |
|----------------------------|-------|--------|---|--------|--------|--|
| Cambridge Desiltation Pond | 1,089 | 1,000 | 0 | 1,000 | 1,000 | |
| Upper Grand Restoration | 0 | 30,000 | 0 | 10,000 | 10,000 | |

| | | | | | | |
|------------------------------|------------------|------------------|------------------|------------------|------------------|---------------|
| TOTAL REVENUE | 1,938,368 | 1,820,500 | 2,768,790 | 1,815,500 | 1,890,500 | 75,000 |
| Net Surplus/(Deficit) | 7,670 | 0 | 982,997 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 7 - Communications
 FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|-------------------------------------|----------------|----------------|----------------|----------------------|---------------------|--------------------|
| Compensation and Benefits | 454,762 | 504,300 | 455,150 | 504,300 | 519,300 | 15,000 |
| Administration Expenses | 63,979 | 74,000 | 71,532 | 74,000 | 74,000 | |
| Other Operating Expenses | 79,842 | 98,600 | 33,235 | 98,600 | 48,600 | (50,000) |
| Total OPERATING Expenditures | 598,583 | 676,900 | 559,917 | 676,900 | 641,900 | (35,000) |

| | | | | | | |
|----------------------------------|---------------|----------|----------|----------|----------|--|
| Total FUNDING to RESERVES | 40,000 | - | - | - | - | |
|----------------------------------|---------------|----------|----------|----------|----------|--|

| | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 638,583 | 676,900 | 559,917 | 676,900 | 641,900 | (35,000) |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|

Funding

Municipal

| | | | | | | |
|------------------------------------|---------|---------|---------|---------|---------|--|
| General Municipal Levy (Operating) | 629,300 | 676,900 | 676,900 | 676,900 | 676,900 | |
|------------------------------------|---------|---------|---------|---------|---------|--|

Self Generated

| | | | | | | |
|------------------------|--------|---|---|---|---|--|
| Donations - Foundation | 40,000 | 0 | 0 | 0 | 0 | |
|------------------------|--------|---|---|---|---|--|

| | | | | | | |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------|
| TOTAL REVENUE | 669,300 | 676,900 | 676,900 | 676,900 | 676,900 | 0 |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------|

| | | | | | | |
|------------------------------|---------------|----------|----------------|----------|---------------|---------------|
| Net Surplus/(Deficit) | 30,717 | 0 | 116,983 | 0 | 35,000 | 35,000 |
|------------------------------|---------------|----------|----------------|----------|---------------|---------------|

GRAND RIVER CONSERVATION AUTHORITY
Schedule 8 - Environmental Education
FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| Compensation and Benefits | 886,497 | 876,100 | 829,275 | 881,100 | 881,100 | |
| Administration Expenses | 76,459 | 72,800 | 85,536 | 72,800 | 72,800 | |
| Insurance Expense | 10,446 | 13,100 | 10,447 | 10,600 | 10,600 | |
| Property Taxes | 15,504 | 18,800 | 11,440 | 18,800 | 18,800 | |
| Other Operating Expenses | 235,477 | 265,000 | 250,235 | 285,000 | 285,000 | |
| Total OPERATING Expenditures | 1,224,383 | 1,245,800 | 1,186,933 | 1,268,300 | 1,268,300 | |
| Major Repairs & Maintenance Projects | 0 | 0 | 0 | 0 | 0 | |
| Total CAPITAL Expenditures | 0 | 0 | 0 | 0 | 0 | |
| Apps' Mill Nature Centre Renovations | 262,426 | 220,000 | 257,566 | 240,000 | 240,000 | |
| Total SPECIAL PROJECT Expenditures | 262,426 | 220,000 | 257,566 | 240,000 | 240,000 | |
| Laurel Creek & Shades' Mills Nature Centre | 17,000 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 17,000 | 0 | 0 | 0 | 0 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,503,809 | 1,465,800 | 1,444,499 | 1,508,300 | 1,508,300 | 0 |
| <u>Funding</u> | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 303,900 | 319,300 | 319,300 | 319,300 | 319,300 | |
| Government Grants | | | | | | |
| Provincial | 2,765 | 0 | 3,075 | 0 | 0 | |
| Federal | 88,574 | 53,000 | 48,957 | 53,000 | 53,000 | |
| Self Generated | | | | | | |
| Donations - Foundation | 218,544 | 217,000 | 215,087 | 237,000 | 237,000 | |
| Donations - Other | 10,138 | 0 | 0 | 0 | 0 | |
| Nature Centre Revenue - Schools | 562,178 | 561,500 | 462,316 | 561,500 | 561,500 | |
| Nature Centre Revenue - Community | 26,347 | 33,000 | 36,721 | 33,000 | 33,000 | |
| Nature Centre Revenue - Camps | 288,272 | 282,000 | 309,273 | 307,000 | 307,000 | |
| Merchandise Revenue | 3,647 | 0 | 1,055 | 0 | 0 | |
| TOTAL REVENUE | 1,504,365 | 1,465,800 | 1,395,784 | 1,510,800 | 1,510,800 | 0 |
| Net Surplus/(Deficit) | 556 | 0 | (48,715) | 2,500 | 2,500 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 9 - Corporate Services
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 1,883,139 | 1,834,900 | 1,717,723 | 1,879,900 | 1,879,900 | |
| Administration Expenses | 301,013 | 355,700 | 282,896 | 350,700 | 350,700 | |
| Insurance | 57,980 | 55,000 | 56,897 | 57,000 | 57,000 | |
| Other Operating Expenses | 704,059 | 1,069,105 | 694,255 | 1,019,105 | 959,105 | (60,000) |
| LESS: Recovery of Corporate Services Expenses | (63,721) | (70,000) | (51,214) | (70,000) | (70,000) | |
| Total OPERATING Expenditures | 2,882,470 | 3,244,705 | 2,700,557 | 3,236,705 | 3,176,705 | (60,000) |
| Building | 220,000 | 0 | 0 | 50,000 | 50,000 | |
| Personnel | 35,000 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 255,000 | 0 | 0 | 50,000 | 50,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 3,137,470 | 3,244,705 | 2,700,557 | 3,286,705 | 3,226,705 | (60,000) |
| Funding | | | | | | |
| Municipal | | | | | | |
| General Municipal Levy (Operating) | 2,805,173 | 2,888,273 | 2,888,273 | 2,888,273 | 2,888,273 | |
| Government Grants | | | | | | |
| MNRF Transfer Payments | 70,000 | 70,000 | 70,000 | 70,000 | 70,000 | |
| Provincial | | | | | | |
| Self Generated | | | | | | |
| Donations - Foundation | 0 | | 0 | | | |
| Donations - Other | | | | | | |
| Miscellaneous | | | 25,000 | | 25,000 | 25,000 |
| Funding From Reserves | | | | | | |
| Personnel | 0 | 15,000 | 0 | 15,000 | 15,000 | |
| TOTAL REVENUE | 2,875,173 | 2,973,273 | 2,983,273 | 2,973,273 | 2,998,273 | 25,000 |
| Net Surplus/(Deficit) | (262,297) | (271,432) | 282,716 | (313,432) | (228,432) | 85,000 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 10 - Conservation Lands
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|--------------------|--------------------|--------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 1,066,962 | 1,012,200 | 918,857 | 992,200 | 992,200 | |
| Administration Expenses | 90,519 | 153,400 | 91,304 | 153,400 | 153,400 | |
| Insurance | 157,658 | 167,600 | 148,276 | 148,600 | 148,600 | |
| Other Operating Expenses | 665,795 | 593,000 | 400,082 | 548,000 | 548,000 | |
| Total OPERATING Expenditures | 1,980,934 | 1,926,200 | 1,558,519 | 1,842,200 | 1,842,200 | |
| Land Purchases/Land Sale Expenses | 67,239 | 0 | 126,215 | 60,000 | 126,000 | 66,000 |
| Emerald Ash Borer | 347,796 | 400,000 | 208,618 | 350,000 | 350,000 | |
| Trees for Guelph | 44,382 | 0 | 0 | 0 | 0 | |
| Trails - Capital Maintenance | 4,652 | 187,000 | 163,756 | 237,000 | 237,000 | |
| Total SPECIAL PROJECT Expenditures | 464,069 | 587,000 | 498,589 | 647,000 | 713,000 | 66,000 |
| Forestry | 70,000 | 0 | 0 | 0 | 0 | |
| Land Sale Proceeds | 408,750 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 478,750 | 0 | 0 | 0 | 0 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 2,923,753 | 2,513,200 | 2,057,108 | 2,489,200 | 2,555,200 | 66,000 |
| Funding | | | | | | |
| Municipal | | | | | | |
| Municipal Other | 7,510 | 0 | 0 | 0 | 0 | |
| Government Grants | | | | | | |
| Federal | 4,200 | 93,500 | 3,296 | 93,500 | 93,500 | |
| Self Generated | | | | | | |
| Luther Misc Income | 39,527 | 46,000 | 26,313 | 46,000 | 46,000 | |
| Other Areas Income | 19,564 | 25,000 | 21,241 | 25,000 | 25,000 | |
| Timber Sales | 69,560 | 15,000 | 2,219 | 15,000 | 15,000 | |
| Land Sale Proceeds | 408,750 | 0 | 0 | 0 | 0 | |
| Donations - Foundation | 88,661 | 143,500 | 88,265 | 143,500 | 143,500 | |
| Donations - Other | 44,382 | 15,000 | 0 | 15,000 | 15,000 | |
| Miscellaneous Other | 50,000 | 0 | 2,854 | 0 | 0 | |
| Funding From Reserves | | | | | | |
| Land | 67,239 | 400,000 | 0 | 410,000 | 476,000 | 66,000 |
| Conservation Area Reserve (Dickson Trail funding) | 0 | 0 | 0 | 50,000 | 50,000 | |
| Forestry (EAB)/Ice Storm/Legal | 185,000 | 0 | 0 | 0 | 0 | |
| Gravel | 0 | 1,000 | 0 | 1,000 | 1,000 | |
| TOTAL REVENUE | 984,393 | 739,000 | 144,188 | 799,000 | 865,000 | 66,000 |
| Net Surplus/(Deficit) | (1,939,360) | (1,774,200) | (1,912,920) | (1,690,200) | (1,690,200) | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 11 - Property Rentals
FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| Compensation and Benefits | 524,518 | 602,500 | 524,642 | 602,500 | 602,500 | |
| Administration Expenses | 71,726 | 71,500 | 61,795 | 71,500 | 71,500 | |
| Insurance Expense | 15,788 | 11,300 | 14,787 | 15,300 | 15,300 | |
| Property Taxes | 141,710 | 98,000 | 129,282 | 98,000 | 129,000 | 31,000 |
| Other Operating Expenses | 1,012,631 | 1,014,600 | 912,455 | 1,209,600 | 1,199,600 | (10,000) |
| Total OPERATING Expenditures | 1,766,373 | 1,797,900 | 1,642,961 | 1,996,900 | 2,017,900 | 21,000 |
| Property Development | - | 50,000 | - | 50,000 | 50,000 | |
| Total SPECIAL PROJECT Expenditures | 0 | 50,000 | 0 | 50,000 | 50,000 | |
| Cottage Lot Program-Belwood | (40,000) | 0 | 0 | 0 | 0 | |
| Cottage Lot Program-Conestogo | 80,000 | 0 | 0 | 0 | 0 | |
| Demolitions | 135,000 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 175,000 | 0 | 0 | 0 | 0 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 1,941,373 | 1,847,900 | 1,642,961 | 2,046,900 | 2,067,900 | 21,000 |
| Funding | | | | | | |
| Self Generated | | | | | | |
| Belwood | 938,700 | 947,000 | 951,238 | 947,000 | 952,000 | 5,000 |
| Conestogo | 1,122,310 | 1,140,000 | 1,137,899 | 1,140,000 | 1,140,000 | |
| Agricultural | 228,229 | 230,000 | 233,309 | 230,000 | 233,000 | 3,000 |
| Residential | 436,815 | 300,000 | 321,582 | 300,000 | 313,000 | 13,000 |
| Miscellaneous | 356,494 | 312,700 | 220,977 | 312,700 | 312,700 | |
| Donations - Foundation | 5,000 | 0 | 0 | 0 | 0 | |
| Funding FROM Reserves | | | | | | |
| Property Development | 0 | 50,000 | 0 | 50,000 | 50,000 | |
| Cottage Lot Program (Ice Storm) | 0 | 0 | 0 | 0 | 0 | |
| Wells/Septic/Demolitions | 210,546 | 250,000 | 0 | 445,000 | 445,000 | |
| TOTAL REVENUE | 3,298,094 | 3,229,700 | 2,865,005 | 3,424,700 | 3,445,700 | 21,000 |
| Net Surplus/(Deficit) | 1,356,721 | 1,381,800 | 1,222,044 | 1,377,800 | 1,377,800 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 12 - Hydro Production
 FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|----------------|----------------|----------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 53,103 | 41,300 | 51,100 | 41,300 | 41,300 | |
| Administration Expenses | 500 | 0 | 538 | 0 | 0 | |
| Other Operating Expenses | 157,621 | 23,700 | 103,880 | 123,700 | 123,700 | |
| Total OPERATING Expenditures | 211,224 | 65,000 | 155,518 | 165,000 | 165,000 | |
| Parkhill Hydro Turbine Project | 0 | 200,000 | 73,005 | 200,000 | 200,000 | |
| Total SPECIAL PROJECT Expenditures | 0 | 200,000 | 73,005 | 200,000 | 200,000 | |
| Land Sale Proceeds | 5,000 | 135,000 | 0 | 35,000 | 35,000 | |
| Total FUNDING to RESERVES | 5,000 | 135,000 | 0 | 35,000 | 35,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 216,224 | 400,000 | 228,523 | 400,000 | 400,000 | 0 |
| Revenue | | | | | | |
| Self Generated | | | | | | |
| Hydro Production-Belwood | 266,373 | 240,000 | 278,829 | 240,000 | 240,000 | |
| Hydro Production-Conestogo | 204,796 | 230,000 | 198,630 | 230,000 | 230,000 | |
| Hydro Production-Guelph | 15,864 | 0 | (4,947) | 0 | 0 | |
| Funding from Reserves | | | | | | |
| Land Sale Proceeds | 0 | 200,000 | 0 | 200,000 | 200,000 | |
| TOTAL REVENUE | 487,033 | 670,000 | 472,512 | 670,000 | 670,000 | 0 |
| Net Surplus/(Deficit) | 270,809 | 270,000 | 243,989 | 270,000 | 270,000 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 13 - Conservation Areas
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|------------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures and Funding to Reserves | | | | | | |
| Compensation and Benefits | 3,707,577 | 3,763,800 | 3,663,122 | 3,763,800 | 3,838,800 | 75,000 |
| Administration Expenses | 166,003 | 169,500 | 169,302 | 169,500 | 169,500 | |
| Property Tax | 53,986 | 58,700 | 57,832 | 58,700 | 58,700 | |
| Other Operating Expenses | 2,744,367 | 2,558,000 | 2,656,794 | 2,858,000 | 2,898,000 | 40,000 |
| Total OPERATING Expenditures | 6,671,933 | 6,550,000 | 6,547,050 | 6,850,000 | 6,965,000 | 115,000 |
| Total CAPITAL Expenditures | 771,510 | 683,000 | 705,352 | 985,000 | 985,000 | |
| Pools & Water Treatment Equipment, Stabilization | 1,184,000 | 150,000 | 0 | 950,000 | 950,000 | |
| Total FUNDING to RESERVES | 1,184,000 | 150,000 | 0 | 950,000 | 950,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 8,627,443 | 7,383,000 | 7,252,402 | 8,785,000 | 8,900,000 | 115,000 |
| Funding | | | | | | |
| Government Grants | | | | | | |
| Provincial | 3,626 | 0 | 0 | 0 | 0 | |
| Federal | 0 | 83,000 | 7,777 | 83,000 | 83,000 | |
| Self Generated | | | | | | |
| Brant | 1,001,617 | 900,000 | 1,101,212 | 1,100,000 | 1,100,000 | |
| Byng Island | 1,079,719 | 1,000,000 | 1,042,428 | 1,030,000 | 1,043,000 | |
| Belwood Lake | 331,586 | 320,000 | 342,329 | 360,000 | 343,000 | |
| Conestogo Lake | 479,875 | 480,000 | 489,799 | 480,000 | 490,000 | |
| Elora Gorge | 1,933,280 | 1,450,000 | 1,633,253 | 1,650,000 | 1,635,000 | |
| Elora Quarry | 307,289 | 150,000 | 253,222 | 250,000 | 253,000 | |
| Guelph Lake | 942,280 | 870,000 | 975,833 | 970,000 | 976,000 | |
| Laurel Creek | 420,028 | 350,000 | 469,034 | 470,000 | 470,000 | |
| Pinehurst Lake | 831,550 | 700,000 | 842,820 | 830,000 | 843,000 | |
| Rockwood | 1,000,260 | 900,000 | 1,097,756 | 1,040,000 | 1,100,000 | |
| Shade's Mills | 205,585 | 180,000 | 221,093 | 220,000 | 222,000 | |
| Total Fee Revenue | 8,533,069 | 7,300,000 | 8,468,779 | 8,400,000 | 8,475,000 | 75,000 |
| Donations-Foundation | 91,203 | 0 | 39,209 | 0 | 40,000 | 40,000 |
| Donations - Other | | | | | | |
| Funding From Reserves | | | | | | |
| Conservation Areas | 0 | 0 | 0 | 302,000 | 302,000 | |
| TOTAL REVENUE | 8,627,898 | 7,383,000 | 8,515,765 | 8,785,000 | 8,900,000 | 115,000 |
| Net Surplus/(Deficit) | 455 | 0 | 1,263,363 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 14 - Miscellaneous
FOR THE PERIOD ENDING November 30, 2017

How much does it cost, and who pays for it?

Expenditures and Funding to Reserves

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|---|----------------|----------------|----------------|----------------------|---------------------|--------------------|
| Other Miscellaneous | 45,814 | 70,000 | 105,775 | 70,000 | 105,000 | 35,000 |
| Total OPERATING Expenditures | 45,814 | 70,000 | 105,775 | 70,000 | 105,000 | 35,000 |
| Total CAPITAL Expenditures | | | | | | |
| Mill Creek Rangers | 29,824 | 35,000 | 28,890 | 35,000 | 35,000 | |
| Total SPECIAL PROJECT Expenditures | 29,824 | 35,000 | 28,890 | 35,000 | 35,000 | |
| Interest Income | 379,790 | 350,000 | 0 | 350,000 | 350,000 | |
| PST Refund/Insurance Proceeds | 0 | 0 | 0 | 0 | 0 | |
| Total FUNDING to RESERVES | 379,790 | 350,000 | 0 | 350,000 | 350,000 | |
| TOTAL EXPENDITURES AND FUNDING TO RESERVES | 455,428 | 455,000 | 134,665 | 455,000 | 490,000 | 35,000 |

Funding

Government Grants

| | | | | | | |
|------------|-------|---|--------|---|---|--|
| Provincial | 0 | 0 | 13,106 | 0 | 0 | |
| Federal | (615) | 0 | 0 | 0 | 0 | |

Self Generated

| | | | | | | |
|-------------------------------------|---------|---------|---------|---------|---------|--------|
| Interest Income-Operating | 0 | 100,000 | 0 | 100,000 | 100,000 | |
| Interest Income-Reserves | 443,137 | 350,000 | 286,642 | 350,000 | 350,000 | |
| Commodity Tax Refunds | 0 | 0 | 0 | 0 | 0 | |
| Miscellaneous | 4,460 | 48,000 | 199 | 48,000 | 63,000 | 15,000 |
| Grand River Conservation Foundation | 36,376 | 35,000 | 32,990 | 35,000 | 35,000 | |

| | | | | | | |
|----------------------|----------------|----------------|----------------|----------------|----------------|---------------|
| TOTAL REVENUE | 483,358 | 533,000 | 332,937 | 533,000 | 548,000 | 15,000 |
|----------------------|----------------|----------------|----------------|----------------|----------------|---------------|

| | | | | | | |
|------------------------------|---------------|---------------|----------------|---------------|---------------|-----------------|
| Net Surplus/(Deficit) | 27,930 | 78,000 | 198,272 | 78,000 | 58,000 | (20,000) |
|------------------------------|---------------|---------------|----------------|---------------|---------------|-----------------|

GRAND RIVER CONSERVATION AUTHORITY
 Schedule 15 - Source Protection Program
 FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|------------------|----------------|------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures | | | | | | |
| Compensation and Benefits | 440,593 | 459,000 | 425,404 | 538,000 | 488,000 | (50,000) |
| Administration Expenses | 47,351 | 56,000 | 44,887 | 54,000 | 54,000 | |
| Other Operating Expenses | 158,232 | 320,000 | 129,875 | 141,000 | 141,000 | |
| Water Budget - Technical Studies | 393,783 | 0 | 594,375 | 1,023,000 | 623,000 | (400,000) |
| Water Quality - Technical Studies | 119,487 | 0 | 122,085 | 214,000 | 214,000 | |
| TOTAL EXPENDITURES | 1,159,446 | 835,000 | 1,316,626 | 1,970,000 | 1,520,000 | (450,000) |
| Funding | | | | | | |
| Government Grants | | | | | | |
| Provincial | 1,159,446 | 835,000 | 1,316,626 | 1,970,000 | 1,520,000 | (450,000) |
| TOTAL FUNDING | 1,159,446 | 835,000 | 1,316,626 | 1,970,000 | 1,520,000 | (450,000) |
| Net Surplus/(Deficit) | 0 | 0 | 0 | 0 | 0 | 0 |

GRAND RIVER CONSERVATION AUTHORITY
Schedule 16 - Information Systems and Motor Pool
FOR THE PERIOD ENDING November 30, 2017

| | Actual 2016 | Budget 2017 | Actual YTD | Previous Forecast | Current Forecast | Forecast Change |
|--|--------------------|--------------------|--------------------|----------------------|---------------------|--------------------|
| How much does it cost, and who pays for it? | | | | | | |
| Expenditures | | | | | | |
| Information Systems | | | | | | |
| Compensation and Benefits | 857,577 | 883,500 | 802,523 | 883,500 | 883,500 | |
| Administrative Expenses | 27,699 | 24,500 | 29,389 | 24,500 | 24,500 | |
| Software and Hardware Maintenance | 134,555 | 147,000 | 140,525 | 147,000 | 147,000 | |
| Supplies and Services | 51,207 | 50,000 | 47,593 | 50,000 | 50,000 | |
| Total OPERATING Expenditures | 1,071,038 | 1,105,000 | 1,020,030 | 1,105,000 | 1,105,000 | |
| Capital Expenses | 178,349 | 250,000 | 203,763 | 250,000 | 250,000 | |
| LESS Internal Charges | (1,206,665) | (1,189,000) | (1,234,082) | (1,189,000) | (1,189,000) | |
| NET Unallocated Expenses | 42,722 | 166,000 | (10,289) | 166,000 | 166,000 | |
| Motor Pool | | | | | | |
| Compensation and Benefits | 274,324 | 283,300 | 233,701 | 283,300 | 283,300 | |
| Administrative Expenses | 30,996 | 25,000 | 17,743 | 25,000 | 25,000 | |
| Insurance | 36,821 | 43,800 | 37,114 | 37,300 | 37,300 | |
| Motor Pool Building and Grounds Maintenance | 7,157 | 10,000 | 17,047 | 10,000 | 10,000 | |
| Equipment, Repairs and Supplies | 273,854 | 272,300 | 220,090 | 272,300 | 272,300 | |
| Fuel | 179,722 | 254,000 | 178,293 | 254,000 | 204,000 | (50,000) |
| Total OPERATING Expenditures | 802,874 | 888,400 | 703,988 | 881,900 | 831,900 | (50,000) |
| Capital Expenses | 348,660 | 300,000 | 145,985 | 300,000 | 300,000 | |
| LESS Internal Charges | (1,146,149) | (1,174,000) | (1,093,569) | (1,174,000) | (1,124,000) | 50,000 |
| NET Unallocated Expenses | 5,385 | 14,400 | (243,596) | 7,900 | 7,900 | 0 |
| TOTAL EXPENDITURES | 48,107 | 180,400 | (253,885) | 173,900 | 173,900 | 0 |
| Funding | | | | | | |
| Government Grants | | | | | | |
| Provincial | 40,000 | 0 | 0 | 0 | 0 | |
| Federal | 0 | 0 | 20,000 | 20,000 | 20,000 | |
| Self Generated | | | | | | |
| Miscellaneous | 0 | | 1,910 | | | |
| TOTAL REVENUE | 40,000 | 0 | 21,910 | 20,000 | 20,000 | |
| Gross Surplus (Deficit) | (8,107) | (180,400) | 275,795 | (153,900) | (153,900) | |
| Funding From Reserves | 2,360,921 | 2,543,400 | | 2,516,900 | 2,466,900 | |
| Funding to Reserves | (2,352,814) | (2,363,000) | | (2,363,000) | (2,313,000) | |
| Net Surplus/(Deficit) | 0 | 0 | 275,795 | 0 | 0 | 0 |

Grand River Conservation Authority

Report number: GM-12-17-128

Date: November 16, 2017

To: Members of the Grand River Conservation Authority

Subject: 2017 Loader Tractor Tender Results

Recommendation:

THAT Grand River Conservation Authority award the tender for the purchase of two (2) 30.7 kW (41.2 HP) PTO four wheel drive tractors with cab and fixed front loader attachments to Crossroads Equipment for a total amount of \$106,147.02 (excluding HST).

Summary:

N/A

Report:

The approved 2017 budget for motor pool included the purchase of two loader tractors. The following vehicles are proposed for replacement:

| Unit No. | Unit to Replace | Age |
|-----------------|----------------------------|------------|
| M4023 | Loader Tractor (Belwood) | 33 years |
| M4011 | Loader Tractor (Conestogo) | 12 years |

The 2017 Loader Tractor Tender was publicly advertised on October 18, 2017 on the Biddingo electronic procurement website. The tender requested bids for the supply of two (2) 30.7 kW (41.2 HP) tractors with power takeoff, four wheel drive, cab and fixed front loader attachments.

Five tender packages were received by the closing date of November 3, 2017. The tender opening committee consisted of Keith Murch, Assistant CAO and Secretary Treasurer, Sonja Radoja, Manager of Corporate Services, Mark Slade, Supervisor of Central Services, and Jim Himsl, Fleet Coordinator. The tender results are summarized below:

| Dealer | Bid Amount (HST excluded) | Ranking | Met Specifications and Requirements |
|-----------------------|--|----------------|--|
| Coleman Equipment | \$98,160.00 | 3 | no |
| Connect Equipment | \$38,821.00 | n/a | no |
| Cross Roads Equipment | \$106,147.02 | 1 | yes |

| Dealer | Bid Amount (HST excluded) | Ranking | Met Specifications and Requirements |
|--------------------------|--|----------------|--|
| Premier Equipment | \$108,000.00 | 2 | yes |
| Stratford Farm Equipment | \$93,000.00 | 4 | no |

Specifications were developed based upon the performance requirements for the areas to which the vehicles would be assigned and that would minimize long term maintenance costs. Three of the five bidders, including the low tender, did not meet the minimum specifications and requirements of the tender. Specifications that were not met included engine displacement, power take-off horsepower low than specified, engine compartment not sealed, hydraulic capacity lower than specified as well as a number of other requirements. The low bidder, Connect Equipment, also did not acknowledge or include information provided in addenda that was issued during the tender process.

The lowest bidder, which met the required specifications, was Cross Roads Equipment. It is recommended that the tender be awarded Cross Roads Equipment at a bid price of \$106,147.02 (HST excluded).

Financial implications:

The 2017 budget included \$300,000 for Motor Pool Capital. The total cost of \$106,147 for these tractors can be accommodated within the 2017 budget. However, the GRCA may not take possession of one or both of these items before December 31st, in which case the funds will be retained in the Motor Pool reserve and carried over to the 2018 budget as applicable. The units being replaced will be disposed of through public auction. Proceeds from the public auction will be transferred to the Motor Pool reserve.

Other department considerations:

None.

Prepared by:

Dave Bennett
Director of Operations

Approved by:

Joe Farwell
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-17-127
Date: December 15, 2017
To: Members of the Grand River Conservation Authority
Subject: Elora Gorge Sanitary Servicing Upgrade - Phase One Tender Results

Recommendation:

THAT the Grand River Conservation Authority award the tender for the Elora Gorge Sanitary Servicing Upgrade project to A. Van Egmond Construction (2005) Ltd. in the amount of \$617,475, excluding HST.

Summary:

N/A

Report:

The Grand River Conservation Authority (GRCA) purchased the Elora Pines Trailer Resort Ltd in 1986 as part of the land assembly for the West Montrose Reservoir Project. The trailer park has served as the seasonal campground for Elora Gorge CA since it was acquired. The campsites in the Pines Campground are serviced with water, hydro and sanitary services. The sanitary services are currently provided by a large on-site septic system. Under the terms of the GRCA's Environmental Compliance Approval (ECA) certificate the GRCA is obligated to connect the sanitary services in the Pines Campground to the municipal sanitary sewer system prior to the start of campground operations in May 2018.

The General Membership approved a recommended servicing option at the June 2017 board meeting. The approved option involves the extension of the existing force main on the north side of the park to the Pines Campground to provide a connection to the Elora Water Pollution Control Plant (WPCP) as Phase One of the project. The fifty (50) campsites in the lower, original section of the campground have been eliminated and will be replaced by an equal number of fully serviced (sanitary, water and hydro) campsites in the upper section of the campground in Phase Two.

The tender for the Elora Gorge Sanitary Servicing Upgrade – Phase One project was publicly advertised on the Biddingo electronic procurement website. The tender closed on November 30, 2017 with three tender packages received. The tender packages were opened at 9:00 am on Friday, December 1, 2017 at GRCA's Administration Centre. The tender opening committee consisted of Keith Murch (Assist. CAO), Dave Bennett

(Director of Operations), Mark Slade (Supervisor of Central Services) and Paul Lucier (Capital Projects Coordinator). Representatives from the consulting engineering team were also present.

The results of the tender process are shown below:

| Rank | Company | Bid Amount (HST Excluded) |
|-------------|--|--------------------------------------|
| 1 | A. Van Egmond Construction (2005) Ltd. | \$617,475.00 |
| 2 | Drexler Construction Limited | \$778,580.00 |
| 3 | Xterra Construction Inc. | \$807,273.34 |

The original cost estimate for Phase One of this project was \$528,080.70 (excl. HST) and was presented to the General Membership at the October 2017 meeting. Subsequently it was determined that the pumping station design needed to be changed which resulted in a substantial cost increase. The original cost estimate for the pumping station design and installation, as presented at the October 2017 meeting, was approximately \$100,000. The low tender bid cost to supply and install the pumping station with the revised design was approximately \$300,000. This increase alone explains the variation between the October 2017 cost estimate and the tendered cost of the project. It should be noted that the low tender bid is still very close to the preliminary Phase One cost estimate of \$600,000 that was presented to the General Membership at the June 2017 meeting.

The low bid for this project was received from A. Van Egmond Construction (2005) Ltd. and meets all of the requirements outlined in the tender package. It is therefore recommended that the tender for the Elora Gorge Sanitary Servicing Upgrade project be awarded to A. Van Egmond Construction (2005) Ltd. in the amount of \$617,475 excluding HST.

Financial implications:

The Five Year Capital Forecast included an amount of \$600,000 in 2017 for the construction of Phase One of this project which is in line with the tendered bid amount. The project will be funded through the Conservation Areas Capital Reserve.

Other department considerations:

None.

Prepared by:

Dave Bennett
Director of Operations

Approved by:

Joe Farwell
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-17-124
Date: December 15, 2017
To: General Membership
Subject: Proposed 2018 Conservation Area User Fees

Recommendation:

THAT the proposed 2018 Conservation Area fees be approved and become effective as of January 1, 2018.

Summary:

This report outlines the proposed conservation area fees for the 2018 season. The report includes recommendations to increase adult day admission fees at all parks, to increase admission fees at Elora Quarry by a larger amount to offset increased costs, increase nightly camping fees by 2% and increase seasonal camping fees by 3%. These increases are necessary to ensure that revenues are sufficient to meet projected expenses. It is expected that recent changes will have a large impact on 2018 expenses.

Report:

Conservation Area fees are reviewed on an annual basis and recommended fee changes are presented to the General Membership for approval. This review includes the fees for day use admission, nightly camping, monthly camping, seasonal camping, and hunting. Proposed fees are determined through an analysis of estimated sales volumes for each revenue stream, with fees adjusted as necessary to cover forecast expenditures for the following year.

The Ontario Government recently passed legislation known as Bill 148 The Fair Workplaces, Better Jobs Act. This legislation will increase the minimum wage to \$14.00/hour effective January 1, 2018. The conservation areas employ a large number of students during the summer for gatehouse staff, maintenance, security and life guards. A preliminary financial analysis indicates that the minimum wage changes could result in additional salary expenses in excess of \$200,000 for the 2018 park season. The fee increases proposed in this report will cover the cost of the minimum wage increase.

Admission Fees

a) Day Use Admission Fees

The proposed fee schedule for day use admission at the various conservation areas is shown in the table below. The fees are competitive with neighbouring conservation authorities. The pool entrance fee at Byng Island and Brant Park will remain unchanged at \$1.00 per person.

For 2018 it is proposed to increase the adult day use fee by \$0.50 per person. The entry fee for children is proposed to remain at \$3.00. The discounted rate for seniors and persons with disabilities is proposed to remain at \$5.50. The day admission rate of \$12 per car, when entering through automatic gates, will increase to \$14.

b) Elora Quarry Admission Fees

Attendance at the Elora Quarry has increased significantly between 2013 (27,628) and 2017 (66,432). In 2016 attendance reached a record high of 85,909 persons. This was the highest volume of day use visitations of any conservation area that year. Rising attendance levels has put increased pressure on staffing for maintenance, security and traffic control, has greater impact on the local environment and can negatively affect the visitor experience.

In response to this issue, a daily capacity limit of 1,300 was set for the 2017 season. Four additional staff were added the park's operation, and over \$25,000 was spent on paid duty police officers for enforcement and traffic control. The capacity controls reduced visitation by over 19,000 people however the levels are still very high.

The actions put in place to manage visitation have increased the operating costs at Elora Quarry by approximately \$65,000 and this cost will be higher in 2018 as the adjustments to the minimum wage are implemented. In order to maintain the current controls it is proposed to raise the price for day use admission at Elora Quarry Conservation Area to \$10.00 for adults, \$7.50 for seniors and persons with disabilities, and \$5.00 for children.

Proposed 2017 Day Use Fees

| | 2017 Admission Fees | | | 2018 Proposed Admission Fees | | |
|-------------------------|----------------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Adult | Senior | Child | Adult | Senior | Child |
| *All Conservation Areas | \$6.50 | \$5.50 | \$3.00 | \$7.00 | \$5.50 | \$3.00 |
| Elora Quarry | \$6.50 | \$5.50 | \$3.00 | \$10.00 | \$7.50 | \$5.00 |

**Including Luther Marsh Wildlife Management Area, excluding Elora Quarry*

Membership Passes

a) Grand River Park Memberships

The rates for the Grand River Park Membership will remain unchanged for 2018. The current rates are competitive with neighbouring conservation authorities. The existing rate for membership pass is \$130.00. A discounted pass is offered for seniors and persons with disabilities at a cost of \$115. The last rate change was in 2017 when memberships were increased by \$5.00. Memberships are valid for one year from the date of activation and allow entry to 11 parks and the Luther Marsh Wildlife Management Area, for up to 6 people per visit. It is also proposed to continue the voucher program which currently offers purchasers of the Grand River Park Membership discounts on admissions, rentals, etc. with an equivalent value of nearly \$80.

b) Individual Season Passes

The Individual Season Pass permits entry to 11 parks and the Luther Marsh Wildlife Management Area for a single person. The pass provides unlimited visitation for the calendar year in which the pass was purchased. The rates for the Individual Season Pass have remained the same since 2011 at \$50.00 for adults, \$45.00 for seniors and persons with disabilities and \$40.00 for children.

The Individual Season Pass was originally developed to be a walk-in pass for Laurel Creek and Shade's Mills Conservation Areas. Situated in suburban neighbourhoods, there was a large demand for an alternative to the seasonal vehicle pass. Over time the pass has been allowed to be used at all of the GRCA conservation areas as well as permitting entry for a single person in a vehicle.

Over the past several years there has been a decline in the number of Individual Season Passes sold as more park patrons choose the benefits of the Grand River Park Membership Pass. The individual pass also does not work with automatic gates systems as it would be impossible to limit the number of people entering the conservation area with this pass. Consequently, the Individual

Season Pass program will be reviewed during the 2018 season to determine whether it should be continued in 2019.

For 2018 it is proposed that the fees be increased for the Individual Season Pass to reflect the proposed increases in day use admission fees. The individual adult pass prices were originally set as equivalent to ten (10) entries at the regular day use admission rate. As a result, the adult fee would be increased to \$70. The discounted pass for seniors and persons with disabilities would be increased to \$60 and the child pass would increase to \$50.

To encourage patrons to transition to the Grand River Park Membership pass, it is proposed to offer 2017 Individual Season Pass holders a 15% discount if they wish to upgrade to a Grand River Park Membership, which would lower the cost of the membership pass to \$110. This offer would be limited to one discounted membership per household. In addition, during 2018, purchasers of the individual passes will be asked to complete a short survey that will assist the GRCA in future decision making regarding the Individual Season Pass.

Camping Fees

a) Nightly Camping Fees

Rates are proposed to be raised by 2% representing an increase of \$1.00 for nightly campers in both peak and shoulder seasons. Further adjustments have been made to nightly rates at Conestogo Lake, and Laurel Creek so that rates for various campsite types can be standardized across the park system. The only exception to this is at Rockwood Conservation Area where high demand for limited campsites justifies higher fees. The proposed fees for nightly camping are shown in Appendix A.

b) Monthly Camping Fees

The GRCA campgrounds periodically receive requests for month-long camping stays. This type of booking can only be made through the parks directly, is dependent on campsite availability, and is conditional on the monthly camping agreement terms. These permits are sold to allow for the extended occupancy of a nightly campsite at a discounted rate.

In the past there has been some variation in the monthly camping fees that have been charged at the various conservation areas. For 2018 there is a desire to standardize the fees by campsite service type. As a result monthly fees will be increase at some parks and remain the same at others. The fees shown below equal the highest monthly rates that were charged in 2017.

2018 Proposed Monthly Camping Fees

| <i>Service Type</i> | <i>Proposed Fees</i> |
|------------------------|----------------------|
| Monthly Unserviced | \$625.00 |
| Monthly Serviced (EW) | \$800.00 |
| Monthly Serviced (EWS) | \$855.00 |

c) Seasonal Camping Fees

Seasonal Camping Fees are proposed to increase by 3% and rounded to the nearest \$5.00. The proposed fees are shown in Appendix B.

Fee Rate Comparison

Accompanying this report are comparison statistics from Ontario Parks, other Conservation Authorities, and private campground operators. Each year the GRCA compares proposed conservation area fees against competitor's fees to ensure that the proposed fee structure is in line with the rates charged by operators of similar facilities and services. The rate comparisons for day use admissions are shown in Appendix C, the comparison for nightly camping is shown in Appendix D and the comparison for seasonal camping is shown in Appendix E. In most cases fee rates for 2018 are not yet available for competitors. As a result the comparator tables show 2017 fees. The proposed 2018 fees generally fall in the middle of the range of fees for GRCA's competitors.

Hunting Fees

Hunting is offered within designated zones at Belwood Lake, Conestogo Lake, Luther Marsh Wildlife Management Area and at 19 miscellaneous properties throughout the central and northern portions of the watershed. Hunters must possess a GRCA hunting permit and the appropriate provincial and/or federal hunting license(s) and stamps and/or tags to use these properties. The fees for the various classes of hunting permits offered by the GRCA are shown in the table below. No increase is proposed for 2018.

2018 Proposed Hunting Fees

| | <i>Permit Fees</i> |
|---|--------------------|
| <i>Belwood Lake</i> | |
| Day Hunting | \$15.00 |
| Seasonal Permit | \$120.00 |
| <i>Conestogo Lake</i> | |
| Full Permit (All Game) | \$400.00 |
| Deer Archery Only | \$160.00 |
| Deer Archery and Controlled Hunt | \$300.00 |
| Pheasant/Small Game/Migratory Birds | \$270.00 |
| Guest Pass | \$30.00 |
| <i>Luther Marsh</i> | |
| Day Pass | \$15.00 |
| Season Hunting Pass (Sept. - Feb.) All Game | \$300.00 |
| Season Deer Only Pass (Oct. - Dec.) | \$160.00 |
| Season Small Game/Migratory Birds Pass (Sept. - Feb.) | \$160.00 |
| Opening Day of Migratory Birds | \$25.00 |
| Miscellaneous Hunting Areas | |
| Seasonal Permit | \$65 |

Financial implications:

The annual Conservation Areas budget is a break-even budget. The program is not allocated any general municipal levy. The program relies on fee revenues to fund annual operating expenditures. In addition to fee revenues, donations, and ad hoc government grants may be available to fund capital projects. Prior year surpluses have been placed into the Conservation Area Reserve and will

be used to invest in the renewal of aging infrastructure or new capital projects. A portion of the reserve will continue to be retained in order to fund an operating deficit should the need arise.

Other department considerations:

N/A

Prepared by:

Melissa Coderre
Park Operations Coordinator

Dave Bennett
Director of Operations

Approved by:

Joe Farwell
Chief Administrative Officer

APPENDIX A: 2018 PROPOSED NIGHTLY CAMPING RATES

| | <i>Shoulder Seasons (May 1st-mid-June^h & After the Labour Day)</i> | <i>Peak Season (mid-June to Labour Day Weekend)</i> |
|---------------------------------|--|---|
| <i>Brant Park</i> | | |
| Premium Unserviced | \$35.00 | \$40.00 |
| Premium Serviced | \$43.00 | \$48.00 |
| Premium (Sewer) Serviced | \$48.00 | \$53.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Byng Island</i> | | |
| Premium Unserviced (Waterfront) | \$43.00 | \$48.00 |
| Premium Serviced | \$43.00 | \$48.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Conestogo Lake</i> | | |
| Premium Serviced | \$43.00 | \$48.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Elora Gorge</i> | | |
| Premium Unserviced | \$35.00 | \$40.00 |
| Premium Serviced | \$43.00 | \$48.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced (Electricity) | \$40.00 | \$45.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Guelph Lake</i> | | |
| Premium Unserviced | \$35.00 | \$40.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Laurel Creek</i> | | |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Pinehurst</i> | | |
| Premium Serviced | \$43.00 | \$48.00 |
| Standard Unserviced | \$34.00 | \$39.00 |
| Standard Serviced | \$42.00 | \$47.00 |
| <i>Rockwood</i> | | |
| Premium Unserviced | \$40.00 | \$43.00 |
| Premium Serviced | \$50.00 | \$53.00 |
| Standard Unserviced | \$39.00 | \$42.00 |
| Standard Serviced | \$49.00 | \$52.00 |
| Standard (Sewer) Serviced | \$54.00 | \$57.00 |

APPENDIX B: 2018 PROPOSED SEASONAL CAMPING FEES

| | 2017 Price | % Increase | Proposed Price |
|---------------------------------|-------------------|-------------------|-----------------------|
| Brant Park | | | |
| Premium Unserviced (Waterfront) | \$ 2,130.00 | 3% | \$ 2,195.00 |
| Premium Serviced (EWS) | \$ 2,550.00 | 3% | \$ 2,625.00 |
| Standard Unserviced | \$ 1,700.00 | 3% | \$ 1,750.00 |
| Standard Serviced | \$ 2,350.00 | 3% | \$ 2,420.00 |
| Serviced (Water Only) | \$ 1,830.00 | 3% | \$ 1,885.00 |
| Byng Island | | | |
| Premium Unserviced (Waterfront) | \$ 2,105.00 | 3% | \$ 2,170.00 |
| Premium Serviced (Waterfront) | \$ 2,760.00 | 3% | \$ 2,845.00 |
| Standard Unserviced | \$ 1,735.00 | 3% | \$ 1,785.00 |
| Standard Serviced | \$ 2,475.00 | 3% | \$ 2,550.00 |
| Standard water only | \$ 1,860.00 | 3% | \$ 1,915.00 |
| Conestogo Lake | | | |
| Premium Unserviced | \$ 1,685.00 | 3% | \$ 1,735.00 |
| Standard Serviced | \$ 2,035.00 | 3% | \$ 2,095.00 |
| Elora Gorge | | | |
| Premium Serviced (Sewer) | \$ 2,700.00 | 3% | \$ 2,780.00 |
| Standard Serviced (Sewer) | \$ 2,660.00 | 3% | \$ 2,740.00 |
| Standard Serviced | \$ 2,350.00 | 3% | \$ 2,420.00 |
| Guelph Lake | | | |
| Premium Unserviced (Waterfront) | \$ 1,975.00 | 3% | \$ 2,035.00 |
| Standard Unserviced | \$ 1,665.00 | 3% | \$ 1,715.00 |
| Standard Serviced | \$ 2,350.00 | 3% | \$ 2,420.00 |
| Laurel Creek | | | |
| Premium Unserviced | \$ 1,905.00 | 3% | \$ 1,960.00 |
| Standard Unserviced | \$ 1,610.00 | 3% | \$ 1,660.00 |
| Standard Serviced | \$ 2,240.00 | 3% | \$ 2,305.00 |
| Pinehurst | | | |
| Standard Unserviced | \$ 1,665.00 | 3% | \$ 1,715.00 |
| Standard Serviced | \$ 2,350.00 | 3% | \$ 2,420.00 |

APPENDIX C: DAY USE AREA ADMISSION FEE COMPARISON

| | <i>Adult</i> | <i>Child</i> | <i>Seniors</i> | <i>People w/ Disabilities</i> | <i>Vehicle</i> | <i>Membership Pass</i> | <i>M.Pass Senior/Dis.</i> |
|-------------------------------------|-----------------|-----------------|--------------------------------|-----------------------------------|----------------|----------------------------|-------------------------------|
| GRCA – 2018 Proposed Rates | | | | | | | |
| All GRCA Parks | \$7.00 | \$3.00 | \$5.50 | \$5.50 | \$12.00 | \$130.00 | \$115.00 |
| Competitors Fees | | | | | | | |
| *Ontario Parks | <i>Adult</i> | <i>Child</i> | <i>Senior Vehicle Pass</i> | <i>Ppl w. Dis. Vehicle</i> | <i>Vehicle</i> | <i>Membership Pass</i> | <i>M.Pass Senior/Dis.</i> |
| Regular (Max.) | \$2.00 | \$1.00 | \$10.00 | \$16.00 | \$20.00 | \$175.00 | |
| Regular (Min.) | | | \$5.50 | \$9.00 | \$11.25 | | |
| Conservation Authorities | <i>Adult</i> | <i>Child</i> | <i>Seniors</i> | <i>People w/ Disabilities</i> | <i>Vehicle</i> | <i>Membership Pass</i> | <i>M.Pass Senior/Dis.</i> |
| Upper Thames River | \$7.00 | \$3.00 | | | \$13.00 | \$110.00 | |
| Hamilton (vehicle + \$5/passenger) | \$5.00 | \$5.00 | \$4.50 | \$4.50 | \$10.00 | | \$90.00 |
| Long Point Region (walk in only) | \$5.00 | | \$4.00 | | | | |
| Long Point Region | \$8.00 | \$3.50 | \$7.00 | | \$12 - \$14.00 | \$80.00 | |
| Niagara Peninsula | \$7.00 | \$5.00 | \$5.00 | | \$21.00 | | |
| Halton Conservation | \$6.75 - \$7.50 | \$5.00 - \$5.25 | \$5.75 - \$6.50 | | | \$129.95 | \$110.45 |
| Credit Valley Conservation | \$6.00 | \$3.00 | \$4.75 | | **\$25.00 | \$113.00 | |
| Toronto and Region Conservation | \$6.50 | \$3.20 | \$5.50 | | | ***\$135.00 | |
| Private Campgrounds | <i>Adult</i> | <i>Child</i> | <i>Seniors</i> | <i>People w/ Disabilities</i> | <i>Vehicle</i> | <i>Membership Pass</i> | <i>M.Pass Senior/Dis.</i> |
| Country Garden RV Park (Petersburg) | \$5.00 | | | | | | |
| Knight's Beach Resort (Dunnville) | \$7.35 | | | | \$14.70 | | |
| Pine Valley Park (Branchton) | \$11.30 | \$5.65 | | | | | |
| Bingeman's Camping Resort | \$25.95 | \$16.95 | \$16.95 | | | \$89.95 | |
| Emerald Lake (Puslinch) | \$17.00 | \$17.00 | \$10.00 | | | | |
| Flamboro Valley Camping Resort | \$7.00 | \$5.00 | | | | | |
| Highland Pines Campground (Belwood) | \$5.00 | \$2.50 | | | | | |

**Ontario Parks day fees are subsidized by the Province of Ontario*

***Maximum charge per vehicle of up to 6 people*

****Joint membership with CVC (Plus HST and Shipping)*

APPENDIX D: RATE COMPARISON FOR NIGHTLY CAMPING

| 2018 Proposed GRCA Nightly Camping Fees | Unserviced | Serviced | Serviced (with Sewer) |
|--|-------------------|-----------------|------------------------------|
| GRCA | | | |
| Shoulder Season | \$34.00 | \$42.00 | \$50.00 |
| Peak Season | \$39.00 | \$47.00 | \$55.00 |
| Rockwood Shoulder Season | \$39.00 | \$49.00 | \$57.00 |
| Rockwood Peak Season | \$42.00 | \$52.00 | \$60.00 |

| Competitors Fees | Unserviced | Serviced | Serviced (with Sewer) |
|--|-------------------|-----------------|------------------------------|
| Ontario Parks | | | |
| Ontario Parks Low | \$36.16 | \$41.25 | |
| Ontario Parks Middle | \$41.25 | \$46.90 | |
| Ontario Parks Premium | \$44.92 | \$51.13 | |
| Conservation Areas | | | |
| Upper Thames River | \$38.00 | \$52.00 | |
| Hamilton | \$39.00 | \$45.00 | \$49.50 |
| Long Point Region | \$36.00 | \$47.00 | \$60.00 |
| Niagara Peninsula - Low | \$36.00 | \$40.00 | |
| Niagara Peninsula - High | | \$48.00 | |
| Private Campgrounds | | | |
| Conestoga Family Campground (Moorefield) | \$35.00 | \$40.00 | |
| Country Gardens RV Park (Petersburg) | | | \$55.00 |
| Green Acre Park (Waterloo) - Low | | \$42.00 | \$47.00 |
| Green Acre Park (Waterloo) - High | | \$52.00 | \$57.00 |
| Blue Sky RV Resorts (Dundalk) | | \$54.00 | \$59.00 |
| Knight's Beach Resort (Dunnville) – (Plus HST) | \$42.00 | \$52.00 | \$57.00 |
| Pine Valley Park (Branchton) (Plus HST) | | \$50.00 | |
| Willow Lake Park (Woodstock) (Plus HST) | \$38.00 | \$44.00 | \$50.00 |
| Bingeman's Camping Resort – Low (Plus HST) | \$40.00 | \$45.00 | \$55.00 |
| Bingeman's Camping Resort – High (Plus HST) | \$45.00 | \$50.00 | \$60.00 |
| Emerald Lake (Puslinch) (Plus HST) | | \$85.00 | \$90.00 |
| Flamboro Valley Camping Resort (Plus HST) | \$46.00 | \$51.00 | \$58.00 |
| Highland Pines Campground (Belwood) - Low | | \$75.00 | \$85.00 |

**Hydro Not Included in Fees*

APPENDIX E: RATE COMPARISON FOR SEASONAL CAMPING

| | Unserviced | Serviced | Serviced (w/sewer hookup) | Waterfront/Premium |
|-----------------------------------|-------------------|-----------------|----------------------------------|---------------------------|
| GRCA - 2018 Proposed Rates | | | | |
| Lowest Rates (All GRCA Parks) | \$1,660.00 | \$2095.00 | \$2,625.00 | \$1735.00 |
| Highest Rates (All GRCA Parks) | \$1,785.00 | \$2,550.00 | \$2,740.00 | \$2845.00 |

| Competitors Fees | Unserviced | Serviced | Serviced (w/sewer hookup) | Waterfront/Premium |
|--|-------------------|-----------------|----------------------------------|---------------------------|
| Conservation Authorities | | | | |
| Upper Thames River | \$1,695.00 | \$2,400.00 | | \$3,265.00 |
| Long Point Region | \$1,590.00 | \$2,225.00 | \$2,895.00 | |
| Niagara Peninsula | | \$2,475.00 | | \$2,680.00 |
| Maitland Valley | | \$2,450.00 | | |
| *Private Campgrounds | | | | |
| Conestoga Family Campground (Moorefield) | | | \$1,932.00 | |
| Country Gardens RV Park (Petersburg) | | \$2,900.00 | | |
| Green Acre Park (Waterloo) | | | \$3,780.00 | |
| Knight's Beach Resort (Dunnville) | | \$3,560.00 | | \$4,265.00 |
| Pine Valley Park (Branchton) | | \$2,555.00 | | |
| Willow Lake Park (Woodstock) | | \$2,650.00 | | \$3,000.00 |
| Emerald Lake (Puslinch) | | \$2,900.00 | | \$5,500.00 |
| Flamaboro Valley Camping Resort | | | \$2,400.00 | \$2,900.00 |
| Highland Pines Campground (Belwood) | | | \$3,550.00 | \$10,945.00 |

Note: A majority of private campgrounds charge for hydro based on usage.

Grand River Conservation Authority

Report number: GM-12-17-126

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Conservation Areas Year End Update

Recommendation:

THAT Report GM-12-17-126 Conservation Areas Year End Update be received as information.

Summary:

N/A

Report:

The purpose of this report is to provide a high level overview of the operating status of the eleven (11) fee-for-use conservation areas run by the Grand River Conservation Authority (GRCA). These conservation areas include Belwood Lake, Brant Park, Byng Island, Conestogo Lake, Elora Gorge, Elora Quarry, Guelph Lake, Laurel Creek, Pinehurst Lake, Shade's Mill, and Rockwood.

Historically, these areas have operated from May 1st to October 15th offering a range of recreational activities that include nightly camping, day use visits, swimming, hiking, boating and nature appreciation. Several of the areas also opened for winter programs when weather conditions permit. More recently, Belwood Lake CA, Rockwood CA, Shade's Mill CA and Pinehurst Lake CA have transitioned to year-round operations. It is expected that Laurel Creek will transition to year-round operations in 2018.

The GRCA conservation areas are very popular and welcome a large number of visitors each year. In 2016, the estimated number of total visits was approximately 1.2 million. In the past three years, the number of visitors has been increasing, which is likely due to a combination of factors which may include population growth in the watershed and in adjacent municipalities, an increasing number of people in the prime age group for outdoor recreation (30-49), a continuing low value of the Canadian dollar, steady gasoline prices and an increase in exposure to the conservation areas through social media.

The table below demonstrates the visitation trends for day use admissions, membership passes and camping nights that have been experienced over the past 3 years. Similar information for 2010 has been provided for comparison.

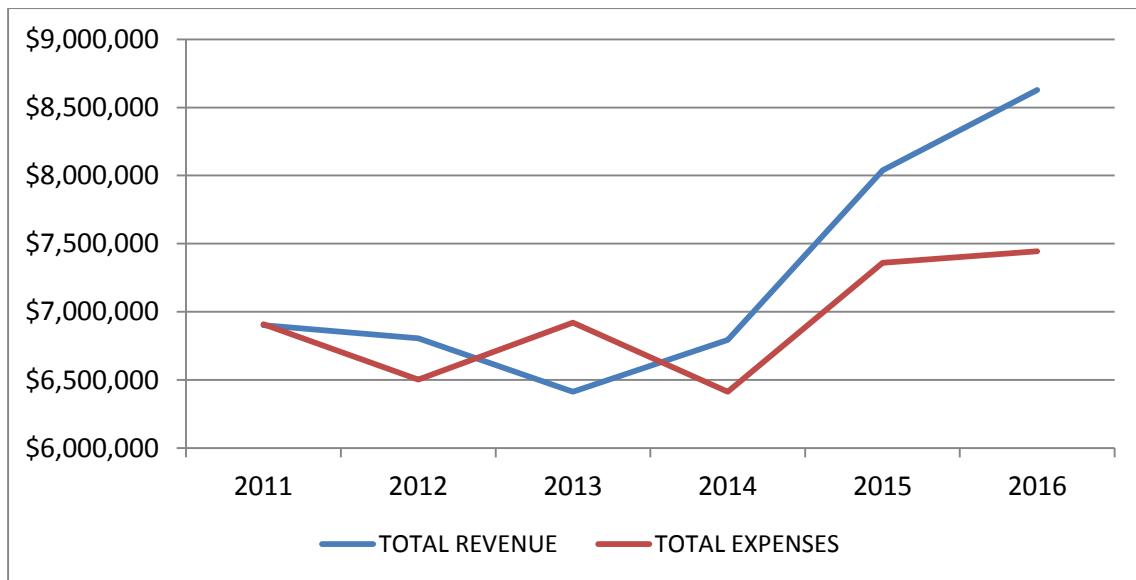
Admission Trends

| | 2010 | 2015 | 2016 | 2017 (as of Oct. 15th) |
|--|---------|---------|---------|---------------------------|
| Day Use Admission | 211,290 | 296,447 | 366,554 | 360,768 |
| Membership Passes / Seasonal Passes | 2,234 | 3,868 | 5,063 | 5,063 |
| No. of Camping Nights | 53,146 | 58,634 | 62,997 | 62,343 |

Conservation Area Revenue

The conservation areas are intended to be operated on a break-even basis. Revenue targets are established based on the estimated expenditures for the year. Any surpluses that are generated are deposited in reserves to address aging infrastructure, fund new capital projects and to provide stabilization funds for years where revenues are lower. The graph below shows revenue vs expenditures for 2011 to 2016.

Revenue vs. Expenditures Since 2011

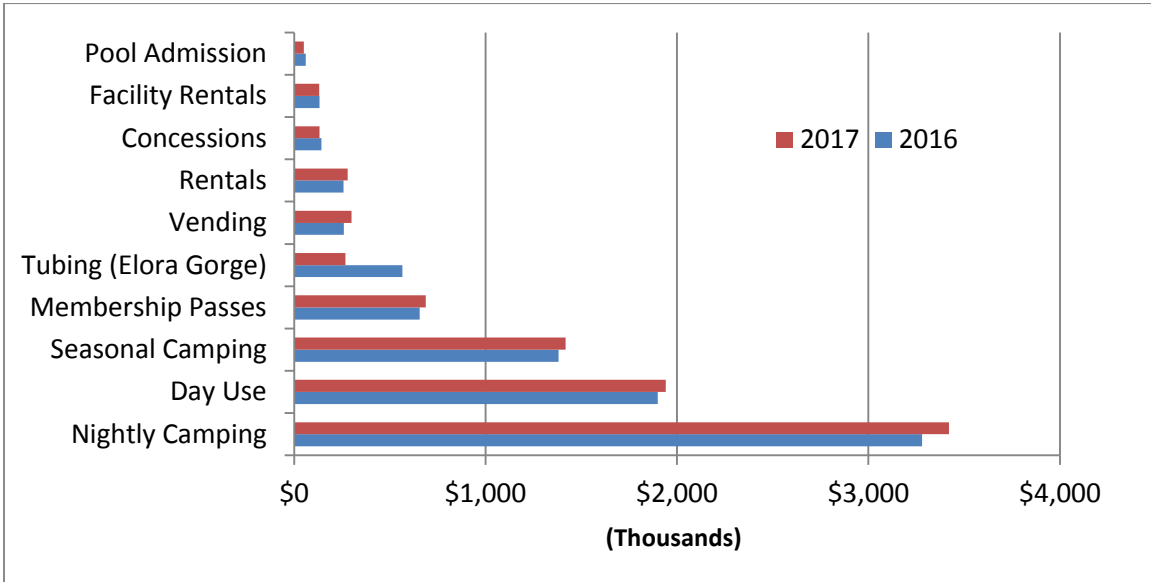


Revenue is highly weather dependent. Years with hot and sunny weekends, particularly long weekends, tend to have the highest revenue. When a pattern of poor weekend weather occurs, as in 2013, revenue is markedly lower. In 2016, hot, dry weather combined with the factors listed above resulted in the highest annual revenue the conservation areas have ever experienced. Revenues in 2017 have been a repeat of the 2016 results despite the fact that the weather was not ideal.

The expenditures shown in the table represent the sum of two expense categories: Operating and Capital. Operating expenses include salaries and benefits, administrative expenses, property taxes and other expenses relate to the operation of the conservation areas. These expenses are set each year but can vary depending on attendance. Capital expenses are much more flexible and can be adjusted on a year to year basis. For example, in 2014 when it appeared that revenues were going to be lower than expected, capital projects were deferred to the following year to contain expenses.

Revenue is generated from a number of activities and services. The table below illustrates the major revenue streams for 2016 as compared to 2017 (as of Oct. 15/17).

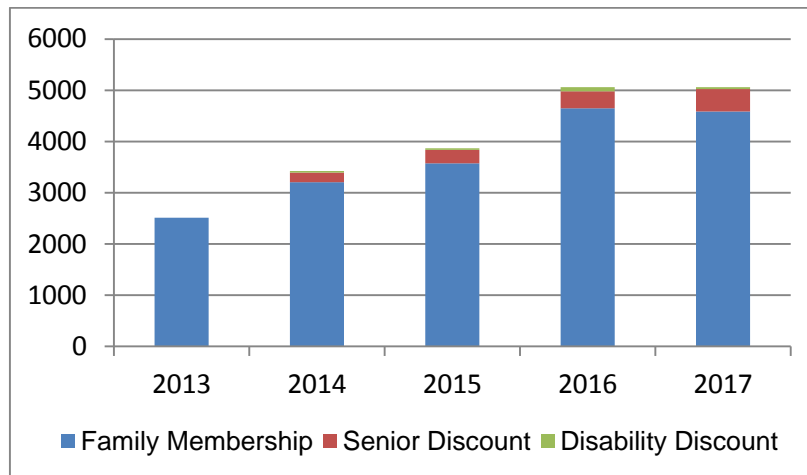
Self-generated Conservation Area Revenue – 2016 & 2017



Membership Passes

In 2013, the seasonal pass windshield sticker was changed to a membership card. This change was made in anticipation of the installation of the first automatic gates. At the same time the validity period for the pass was changed from being valid for the calendar year to being valid for a 12 month period from the date of purchase. These two changes, along with the installation of automatic gates, have had a positive impact on membership pass sales since 2013. The graph below illustrates membership pass sales from 2013 to 2017 (as of Oct. 15/17).

Seasonal Pass / Membership Pass Sales Since 2013



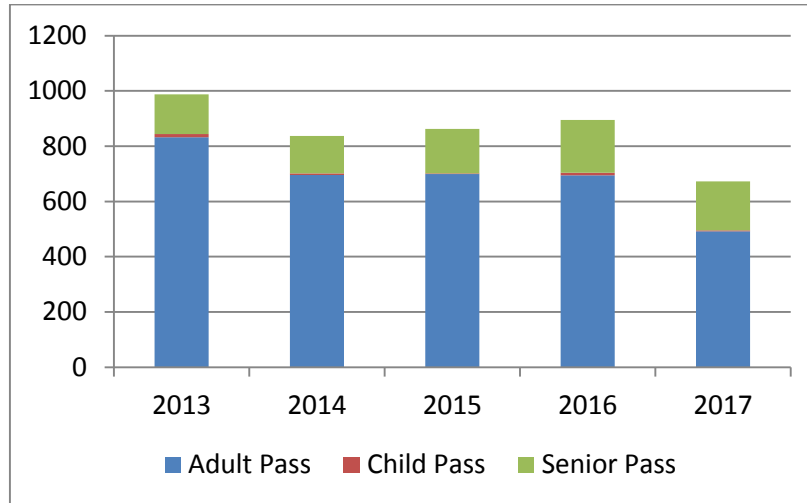
Sales have increased each year during this five year period with an overall 67% increase since 2013. In 2016 the GRCA implemented on-line sales of the Grand River Park Membership Pass. In 2016, 474 memberships were sold on-line and in 2017 that

number has increased to 533 passes, or 11% of the total memberships sold to date this year.

In addition to the family membership pass, the GRCA offers individual adult, child and senior passes. The original intent of these passes was to provide access for pedestrians or cyclists for single person at Laurel Creek CA and Shade’s Mill CA. Over time, the individual pass program was extended to other parks and gradually became more than a walk-in pass as people were allowed to enter in their vehicle.

As automatic gates are implemented at more conservation areas, the individual pass becomes more difficult to support. When automatic gates are in operation, there is no way to ensure that only a single person is entering. The table below shows the number of individual passes that are sold each year. The number of individual passes sold has been declining over the past five years as more people purchase the family membership pass. In 2016, 60% of the total individual passes were sold at two conservation areas – Guelph Lake and Laurel Creek. In both cases, a portion of the individual passes are issued to clubs that operate out of the conservation area and this skews the number of passes actually sold.

Number of Individual Season Passes Issued Since 2013



The individual season pass program will be reviewed in 2018 to determine whether it should be continued in its current format, continued in a revised format or discontinued altogether. Information will be collected from individual season pass purchasers regarding their individual pass use to help inform GRCA decision making prior to the 2019 season.

Observed Trends

The following is a brief outline of the opportunities and challenges facing the GRCA conservation areas:

- a) Increased Visitation
 - Increased pressures on the natural environment. This is particularly challenging in areas where there are unique features and sensitive habitats such as are found at Rockwood, Elora Gorge, Elora Quarry and Pinehurst Lake.

- Negative impact on the visitor experience. Many day use beaches are packed every summer weekend, there is greater demand placed on maintenance of washroom facilities, parking becomes more difficult and there are fewer places where visitors can find peace and quiet.
- Impact on park staff. Greater numbers of people mean that there are more issues to deal with on a day to day basis. It also has an impact on the frequency of maintenance activities, particularly washrooms, security and gatehouse personnel.

b) Changing Demographics

- New Canadians. Increased usage by new Canadians presents both a challenge and an opportunity. Lack of familiarity with traditional outdoor activities means that there is a higher level of public education required. At the same time there is an opportunity to introduce people to camping, hiking, fishing, boating and other outdoor pursuits.
- Aging population. The largest cohort of the population is now over 55 years of age. This age group is outside of the typical visitor profile for GRCA conservation areas (24-40). The challenge is how to provide programs and facilities that will attract older visitors.
- Population growth & density. Many of the GRCA conservation areas are within driving distance of major urban areas in the watershed as well as the GTA. Substantial population growth is expected within these areas and will occur at higher densities. As a result, the demand for green space is expected to rise.

c) Public Perception of Conservation Areas

- View of conservation authority property as “public land”. GRCA properties are private lands, however, most of the public view them as part of the broader public open space. There is a perceived “right” to access GRCA property which is difficult to counter.
- Lack of understanding of how conservation areas are funded. Since GRCA property is viewed as public land there is the perception that the public funds the conservation areas through their taxes.

d) Aging Infrastructure

- Most conservation area infrastructure was built in the mid-1960’s to mid-1970’s and is therefore in the 40-50 year range. Higher capital costs can be expected in coming years to replace underground services and buildings that are at the end of their service life.
- Increased visitation places higher demand to add facilities such as washrooms, pavilions, trails, etc. In many cases, existing infrastructure such as gate houses are not sized to accommodate increased numbers of visitors.

Future Considerations

- Potential solutions for localized admission pressures could include setting capacity limits on the number of visitors admitted to the area, encouraging visitors to go to alternate areas where capacity is available by increasing marketing of those areas, or extending the operating season to reduce demand during the peak season. In the longer term options might include expanding

existing conservation areas or potentially opening new areas to meet the demand.

- Targeted marketing could be used to raise the awareness of conservation areas with seniors and new Canadians. This could be combined with revised programming and activities to make these areas attractive e.g. accessible trail development or learn to camp programs.
- There is a need for increased public education on the role of conservation areas within the broader open space system of municipal parkland and provincial parks. The public needs to be aware of how conservation areas are funded and the importance of revenue generated through the payment of fees.
- The five-year capital forecast has identified key areas where additional capital investment is required to address many of the current challenges. It is important to ensure that there is continuous improvement of conservation infrastructure in order to support park operations and to meet public expectations.

Major Capital Projects

The following is a list of the major capital projects that have either been completed in 2017 or are planned for 2018:

- Waterline Replacement, Brant Park CA - 2017
- Washroom Building Reconstruction – Brant Park CA(Fire Insurance Claim) - 2017
- Automatic Gates – Brant Park CA – 2016/17
- Generator Installations, Byng Island CA (Gate & Shop) - 2017
- Playground Equipment Replacement – Byng Island CA & Guelph Lake CA - 2018
- Marston Pavilion Renovations & Accessible Washroom, Elora Gorge CA - 2017
- Pines Campground Sanitary Servicing, Elora Gorge CA – 2017/18
- Automatic Gates – Laurel Creek CA – 2017/18
- Boat Launch Upgrades, Shade’s Mill CA - 2017
- Natural Playground, Shade’s Mill CA - 2017

Financial implications:

Conservation Area revenue is expected to be approximately \$8.5 Million in 2017 (2017 Budget was \$7.3 Million).

Other department considerations:

None.

Prepared by:

Dave Bennett
Director of Operations

Approved by:

Joe Farwell
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM-12-17-125
Date: December 15, 2017
To: Members of Grand River Conservation Authority
Subject: Grand River Conservation Authority Complimentary Membership Passes 2018

Recommendation:

THAT Report GM-12-17-125 - Grand River Conservation Authority Complimentary Membership Passes 2018 be received as information.

Summary:

Not applicable

Report:

Each year Grand River Conservation Authority (GRCA) sells Membership Passes for its parks in accordance with an approved fee schedule. The Parks Membership Pass admits the vehicle and a maximum of six passengers to any GRCA park for day use. The Membership Pass is valid for a one year term from the date of issuance. The use of these passes provides good value for frequent park users and saves staff time in dealing with vehicles entering the parks.

Complimentary Parks Membership passes are issued each year to:

- Members of GRCA
- Members of the Grand River Conservation Foundation
- GRCA regular, part-time, seasonal, temporary and casual staff
- GRCA retirees
- Living members of GRCA's Honour Roll
- GRCA watershed MPs
- GRCA watershed MPPs
- Municipal Heads of Council

The complimentary Parks Membership passes will be issued in January, 2018. Additional passes can be issued on authorization of the Chair or Chief Administrative Officer.

Financial implications:

The 2018 draft Budget allows for the issuance of these complimentary passes. The approved price for a 2018 pass is \$130 including HST, which is the same price charged in 2017.

Other department considerations:

Not applicable

Prepared by:

Dave Bennett
Director of Operations

Approved by:

Joe Farwell
Chief Administrative Officer

Grand River Conservation Authority

Report number: GM- 12-17-131

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Environmental Assessments

Recommendation:

THAT Report GM-12-17-131 Environmental Assessments be received as information.

Summary:

To provide the General Membership of the Grand River Conservation Authority with information on Environmental Assessments being reviewed, a summary report is presented below. The report has been prepared as directed through Motion No. P44-99 (May 18/99) adopted through General Membership Res. No. 55-99 (May 28, 1999).

Report:

Report on Environmental Assessments for November 24, 2017.

A. New Environmental Assessments Received

New: Environmental Assessments received by the Grand River Conservation Authority and currently under review.

First Notice – Eramosa River Bridge, No. B124135, Erin (Ospringe)

The County of Wellington has initiated a Class Environmental Assessment for **Eramosa River Bridge, No. B124135**, which is located on Wellington Road 124, 1 km east of Wellington Road 125, in the Town of Erin. The existing bridge is a single span reinforced concrete rigid frame that carries two lanes of traffic over the Eramosa River. The study will confirm and documents the existing structural deficiencies and identify alternative solutions, including rehabilitation, widening or replacement of the bridge, and evaluate associated environmental impacts. This study will be carried out as a Schedule 'B' project in accordance with the Municipal Class EA process.

The site contains the Eramosa River, its associated floodplain, portions of the Provincially Significant Eramosa River Blue Springs Creek Wetland Complex, slope erosion hazard, and the associated allowances to these features. We have advised the County of Wellington that we have an interest in this EA and will continue with our involvement in the project.

First Notice – County of Wellington Structure No. 120860, Township of Mapleton

The County of Wellington has initiated a Class Environmental Assessment for Lot 9/10 Concession XVII Structure No. 120860, which is located on Wellington Road 12 in the Township of Mapleton, 0.1 km east of 16th Line. The existing structure is a single span

T-beam bridge that has previously been widened and carries two lanes of traffic over a tributary of the Conestogo River. Portions of the structure are in an advanced state of deterioration and this EA will confirm and documents the exiting structural deficiencies, address substandard elements, and make improvements to the crossing which may include partial or full replacement. This study will be carried out as a Schedule 'B' project in accordance with the Municipal Class EA process.

The site contains a tributary of the Conestogo River, its associated floodplain, slope erosion hazard, and the associated allowances to these features. We have advised the County of Wellington that we have an interest in this EA and will continue with our involvement in the project.

B. Classification of Reviewed Environmental Assessments

Minor: Minimal potential resource impacts that can be mitigated using conventional construction methods.

Major: Significant impacts on identified resource features. Alternatives and proposed mitigation will be outlined in detail.

Minor Impacts:

Final Notice –Mapleton Bridge PB 024 Improvements

The Township of Mapleton has completed a Schedule 'B' Class Environmental Assessment for Mapleton Bridge PB024 located on Sideroad 17, 1.5 km north of Wellington Road 45 to determine a strategy to address deficiencies of the existing structure with respect to load capacity, lane width, physical condition and barrier protection.

Mapleton Bridge PB024 is of interest to the GRCA due to the presence of an unnamed tributary of the Conestogo River, associated floodplain and the allowances associated with these features.

The preferred solution involves replacement of the bridge structure with a larger span, full two-lane bridge with potential for re-alignment of the stream to mitigate erosion.

The bridge, built in circa 1920, is listed in the Arch, Truss & Beam Inventory. A Heritage Impact Assessment was completed that recommended the replacement structure should replicate the historic design or be recognized with a plaque.

A permit from the GRCA will be required.

Major Impacts:

None for this report.

Financial implications:

Not Applicable.

Other department considerations:

Not Applicable.

Prepared by:

Fred Natolochny
Supervisor of Resource Planning

Approved by:

Nancy Davy
Director of Resource Management

Grand River Conservation Authority

Report number: GM-12-17-123

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Development, Interference with Wetlands and Alterations to Shorelines and Watercourse Regulation On-line Application Process

Recommendation:

THAT Report GM-12-17-123 Development, Interference with Wetlands and Alterations to Shorelines and Watercourse Regulation On-line Application Process be received for information.

Summary:

As part of ongoing efforts to increase efficiency and to provide improved public service, the ability to apply for a permit under Ontario Regulation 150/06 has been made available through the Grand River Conservation Authority website.

Report:

The potential to have greater efficiencies in processing permit applications has been identified as an objective for a number of years. The increase in the number of permits being processed has highlighted the need to get a streamlined process, when appropriate, and to reduce the amount of staff time spent on administration of the permit process. One of the opportunities identified was to have the permit application available on the GRCA website.

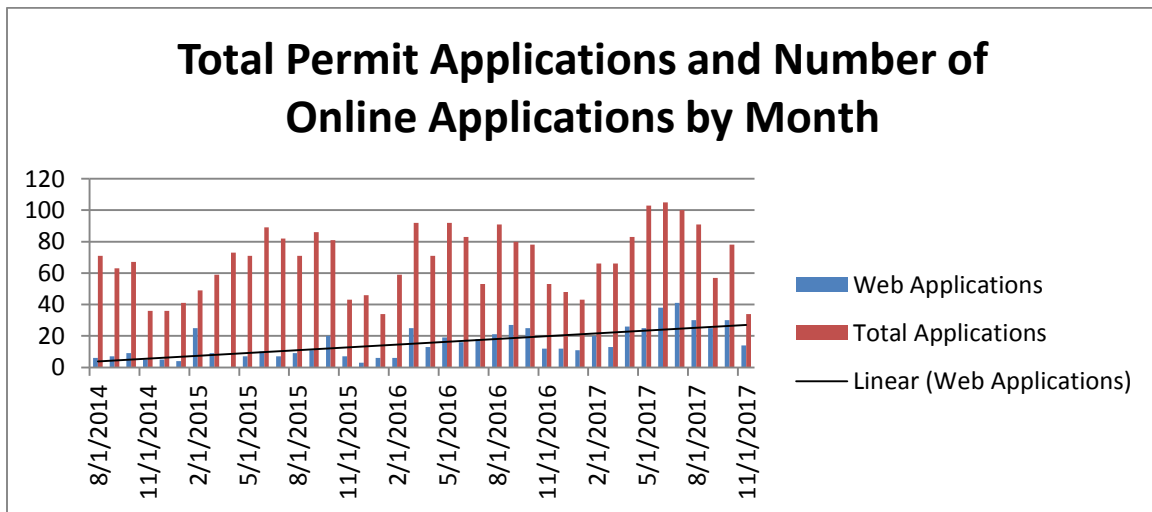


Figure 1. Increase in web applications from 2014-2017

The ability to submit the application form directly from the website was enabled in August 2014. This provided some efficiency as the applicant was able to enter the data,

which now was not required to be entered by staff, and provided an online payment opportunity.

From August 2014 to present we have seen the number of online applications increasing. We anticipate the use of the online application will continue to increase in popularity as more applicants become familiar with this option.

The scope of the first phase of the project did not include a document submission function. As a result we were not able to confirm if an application was complete when submitted, resulting in numerous contacts with the applicant and additional internal work to coordinate the contents of the application.

The next phase for online permit applications is being implemented, and includes the ability to submit plans and reports, as well as automating the fee selection process based on the work proposed. In addition, the application process is integrated with the online mapping. With this revised process, the applicant can fill in the application form, attach plans and reports, select the location of the project on the mapping and pay the fee. The applicant will also receive an email confirmation of their submission which includes the submission date, summary of proposed works, fees paid, and designated permit number for ease of reference.

An additional enhancement to the online submission process enables registered GRCA customers to be invoiced. This addresses a long standing request from our municipal partners and consultants and is an improvement in the way the GRCA does business with other businesses. Implementing this feature required consultation and coordination from Planning, Accounting, and Information Services and it has ultimately streamlined the entire invoicing process for both permits and plan review.

This new process should result in a much better experience for the applicant and achieve efficiencies for staff processing the application. It will require significant modification to the internal permit processing, but should result in savings of staff time in the longer term. We expect that some users who were reluctant to use the online system will now be more inclined to use it as the entire application process can be accommodated.

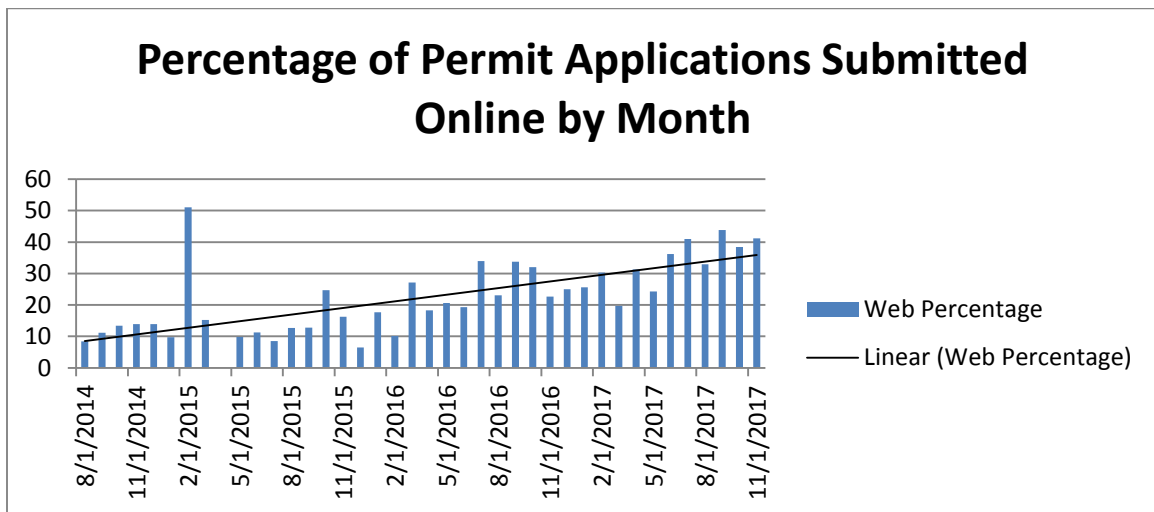


Figure 2. Increase in web applications as a percent of applications received

Staff are continuing to explore opportunities to increase the efficiency of the permit process, and to deal with increased numbers of permits while maintaining service delivery standards.

Financial implications:

There are no financial implications from this process improvement.

Other department considerations:

This project has been undertaken with assist from the Finance, Information Systems and Planning Resources departments.

Prepared by:

Murray Lister
Senior Business Analyst, Database and
Applications Development

Fred Natolochny
Supervisor of Resource Planning

Approved by:

George Sousa
Manager of Information Systems and
Technology

Nancy Davy
Director of Resource Management

Grand River Conservation Authority

Report number: GM-12-17-129

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: GRCA Forest Management Plan 2018-2027

Recommendation:

THAT Report GM-12-17-129 – GRCA Forest Management Plan 2018-2027 be received for information.

Summary:

The Grand River Conservation Authority (GRCA) owns approximately 19,400 hectares (ha) of land. Approximately 60% (11,500 ha) of this land is forested. The ongoing management and stewardship of GRCA owned forests are directed by a Ten Year Forest Management Plan. While the plan provides the foundation and overall direction for GRCA forest management, it is also one of the requirements for participation in the Managed Forest Tax Incentive Program (MFTIP). An updated Forest Management Plan for 2018-2027 was completed and submitted to the MFTIP program in July.

Report:

The objectives of GRCA's Forest Management Plan are to:

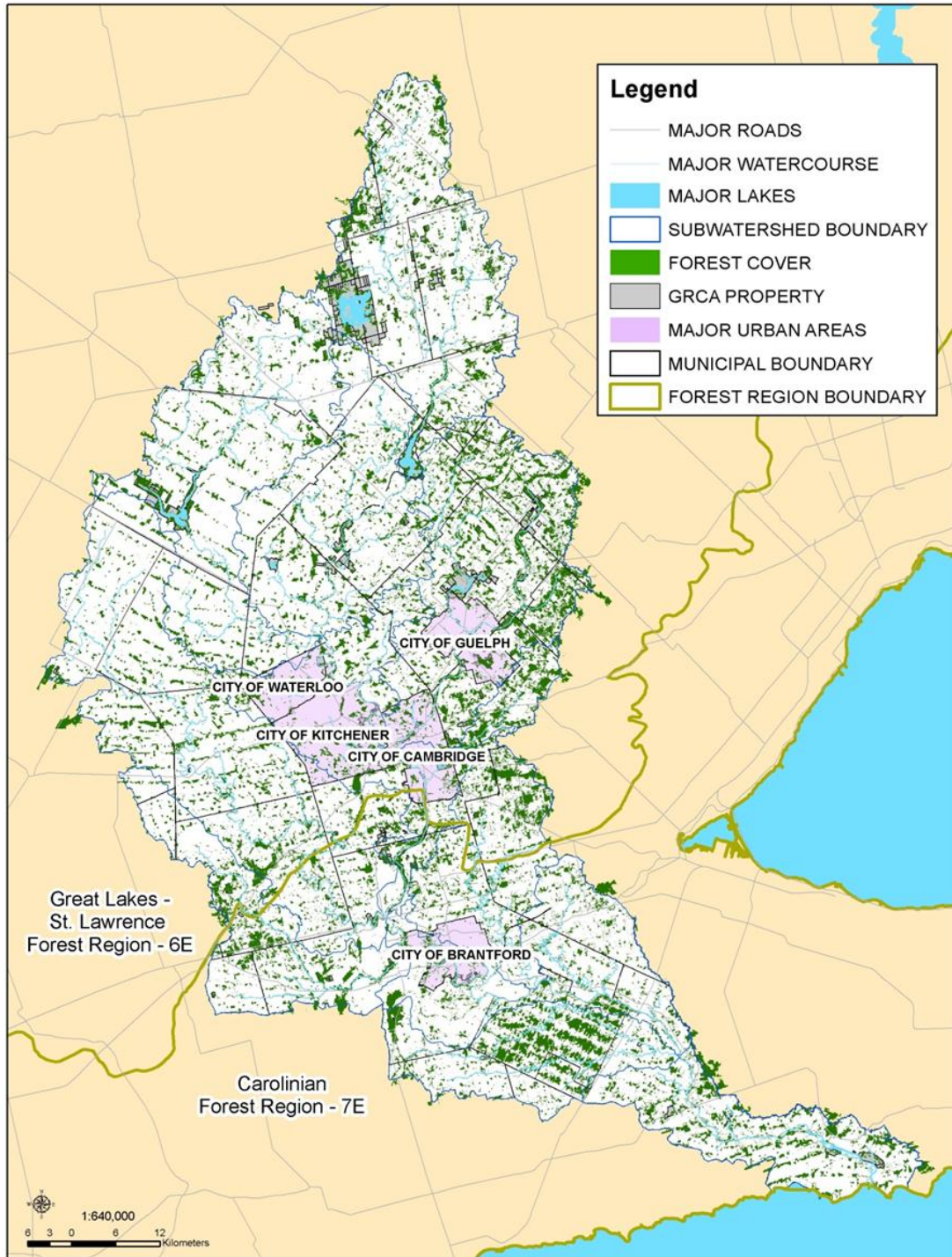
- Characterize the current state of GRCA forests;
- Provide the foundation and overall direction for GRCA forest management;
- Maintain a record of past management activities;
- Meet the requirements of the MFTIP.

Watershed Forests

Forests have a key role in maintaining and restoring healthy natural systems in southern Ontario. They are integral in providing the elements of a healthy landscape needed for a region's human and non-human residents to thrive: clean air and water, productive soils, naturally functioning streams and rivers, recreational opportunities, wood products, and habitat for a wide diversity of animals, plants and other organisms.

Forests currently cover approximately 16% of the Grand River watershed, below the 30% cover suggested by Environment Canada as the level required for sustaining a healthy watershed. Around 7% of the forests in the watershed are on GRCA land. In some subwatersheds very little of the forest is GRCA owned. However, in other areas such as the Conestogo and Upper Grand subwatersheds the percentage of forest cover located on GRCA land is as high as 14% and 21% respectively. As such, in these upper reaches of the watershed, GRCA owned forests are making a substantial contribution to the benefits that watershed forests provide.

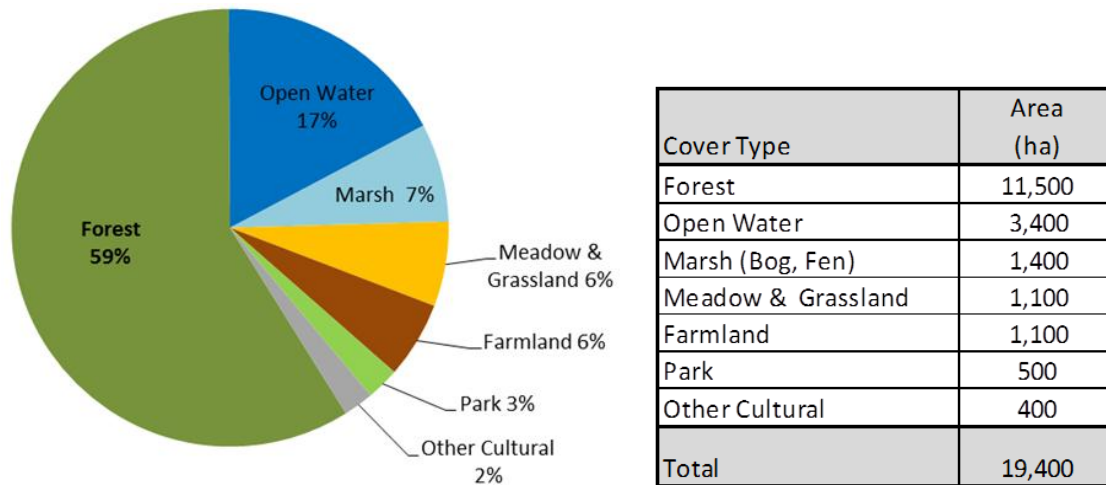
Figure 1 – Forests of the Grand River Watershed



GRCA Forests

The GRCA owns 19,400 hectares of land on over 400 separate parcels. Almost 90% of this land consists of natural cover (forests, water, wetlands, meadows & grasslands), while the remaining area is farmland, active park and other cultural areas (residential or infrastructure). Nearly 60% of GRCA lands are covered by forest.

Figure 2 – GRCA Land Cover by Type



Close to 12,000 hectares of GRCA land is forested. Over 40% of these forests are forest plantations which have been established through planting programs which began in the 1940s. Around one third of GRCA forests are lowlands and swamps, while the remaining 25% are upland forests.

Many of the GRCA owned forests are fairly large blocks and often part of well-forested natural corridors. This helps provide both habitat to sensitive interior forest species and facilitates the movement of forest organisms across the landscape. Although all forests play a role in watershed hydrological processes, lowland forests have an especially important role in water quality and retaining water on the landscape, which mitigates flooding and helps maintain base flows in the summer.

GRCA Forest Management

The GRCA manages its forests and natural areas for multiple environmental and social objectives with the overarching goal of preserving and enhancing the environmental benefits these lands provide.

While the Forest Management Plan influences and helps direct all management and restoration activities on GRCA forest lands, there are a number of primary forest-related activities that are most directly guided by the Plan. They include:

- Reforestation
- Plantation Thinning & Conversion
- Other Timber Harvesting and Salvage
- Forest Insect & Disease Monitoring & Management
- Forest invasive plant control
- Forest Inventory & monitoring

Summary of Past Forest Management Activities 2008-17

Table 1. Summary of Significant Restoration Activities on GRCA Lands 2008-17

| Year | Reforestation | | | Plantation Thinning \ Harvests | | Grassland Establishment, Enhancement, Prescribed Burns | | Other Restoration <small>(Invasive Control, Native Cover Crop, Wetland Creation)</small> | |
|--------------|---------------|-------------------|--------------------|--------------------------------|------------|--|------------|---|------------|
| | # of Sites | Area Planted (ha) | # of trees planted | # of Projects \ Locations | Area (ha) | # of Projects \ Locations | Area (ha) | # of Projects \ Locations | Area (ha) |
| 2017 | 4 | 5 | 8,275 | 2 | 46 | 1 | 16 | 6 | 6 |
| 2016 | 6 | 15 | 24,007 | 2 | 67 | | | 7 | 9 |
| 2015 | 7 | 19 | 32,530 | 1 | 15 | 4 | 54 | 7 | 14 |
| 2014 | 16 | 53 | 95,042 | 1 | 54 | 8 | 96 | 8 | 51 |
| 2013 | 15 | 69 | 110,907 | 1 | 31 | 5 | 62 | 3 | 27 |
| 2012 | 10 | 56 | 90,390 | 1 | 25 | 4 | 23 | 10 | 68 |
| 2011 | 23 | 63 | 88,403 | 2 | 28 | 7 | 43 | 11 | 48 |
| 2010 | 22 | 102 | 167,198 | | | 5 | 53 | 3 | 14 |
| 2009 | 13 | 58 | 87,555 | | | 4 | 63 | 1 | 1 |
| 2008 | 8 | 43 | 66,709 | 2 | 57 | 3 | 17 | | |
| Total | 124 | 483 | 771,016 | 12 | 323 | 41 | 427 | 56 | 238 |

The table above summarizes the significant restoration activities that occurred on GRCA lands over the past management period. Over the past 10 years a very significant amount of reforestation and grassland establishment occurred on GRCA lands. Close to 500 hectares of forest was planted, a significant amount of which occurred at Luther Marsh. Additional large scale plantings occurred at Conestogo Lake, Everton, West Montrose, Guelph Lake, Snyders Flats and Dunnville Marsh. These newly forested areas will significantly contribute to overall forest cover levels and create and augment some significant core forest blocks and their interior forest.

An event that has significantly impacted GRCA forest and property management over the past management period was the detection of emerald ash borer (EAB) in the watershed in 2010. Preparing an overall strategy and forecasting the resources required to deal with the impacts has been a significant undertaking. It is forecasted that the costs of addressing EAB impacts on GRCA lands could be close to \$6 million dollars between 2015 and 2024. The majority of required resources will be to deal with hazard tree issues. The strategy also includes the treatment of 200 ash trees and restoration of heavily impacted areas.

In addition to the natural heritage restoration projects summarized in the table above, other forest management activities that occurred over the past management period include:

- Forest and ELC Inventory Collection & Data Management
- Emerald Ash Borer Strategy Development & Management
 - Detection & Risk Assessment
 - Ash Inventories
 - Hazard Tree Management

- Treatment Program
 - Replacement Planting & Forest Restoration
- Forest health monitoring & research
 - General forest health and insect monitoring
 - EAB trapping and monitoring
 - MOE Forest Biomonitoring network plots
 - MNRF Permanent sample plots
 - Academic research projects
- Tree Risk Management Program
- General Property and Trail Maintenance and Signage

Planned Forest Management Activities 2018-27

Table 2. Overview of Planned GRCA Forest Management Activities 2018-27

| Activity | Area Forecast \ Target | Comments \ Locations |
|---|---------------------------------------|--|
| Plantation Thinning & Conversion | 100 - 150 ha annually | *Locations and timing as directed by the Plantation Management Plan and 3 Year operating plan (both in development) |
| Reforestation & EAB restoration | 5 - 20 ha annually | *Locations and timing as directed by 3 Year operating plan (in development) |
| 'Other' Timber Harvesting & Salvage | 50 - 100 ha over management period | *Locations and timing as directed by 3 Year operating plan (in development) |
| Forest \ ELC Inventory & Data Management | 50 - 100 ha annually | |
| Ash Treeazin Treatments | 200 trees total (100 annually) | |
| Invasive Plant Monitoring & Control | 4 - 10 projects annually | Invasive control projects occurring both within forested and adjacent areas with a significant current focus on phragmites control |
| Other Ongoing Activities | | |
| GRCA Tree Risk Management - as directed by Tree Risk Management Plan and EAB strategy | | |
| Forest Health Monitoring - both internally and through ongoing partnerships with MNRF, MOE, and academia | | |
| Other Restoration Projects - continued implementation of wildflower companion plantings and support of grassland restoration, wetland creation and other projects | | |
| General Forest & Ecological Monitoring & Research - primarily through partnerships with academia and other organizations | | |
| General Property & Trail Maintenance & Signage - as directed by the Conservation Lands Strategy | | |

Increasing annual plantation thinning activity will be a primary focus of this current management period. Enhancing the conversion of the 5000 ha of GRCA plantations to more diverse and complex forests over the next several decades represents a significant opportunity to increase the ecological benefits that GRCA forests provide. A Plantation Management Plan and Three Year Operating Plan are currently in development.

Reforestation activity will be significantly lower than during the past management period. Virtually all of the agricultural land that the GRCA previously targeted for conversion to natural cover has now been restored. Additional reforestation will occur primarily on marginal lands and smaller parcels or buffer strips.

Financial implications:

Forest management expenditures and revenues are included in the annual GRCA budget process and the updated Forest Management Plan will not significantly change ongoing expenditures. Forestry revenues may increase somewhat over this management period with an increase in plantation thinning activity.

The Forest Management Plan is a requirement of the Manage Forest Tax Incentive Program and as such impacts annual property taxes for MFTIP eligible areas.

Other department considerations:

The Forest Management Plan interacts with and compliments a number of plans and strategies which guide or influence the management of GRCA lands including the:

- Tree Risk Management Plan
- Emerald Ash Borer Strategy
- Conservation Lands Strategy (in development)
- Natural Heritage Strategy (in development)
- Individual Park and Property Master & Operating Plans
- Burford Nursery Business and Operating Plan

Prepared by:

Ron Wu-Winter
Watershed Forester

Approved by:

Nancy Davy
Director of Resource Management

Grand River Conservation Authority

Report number: GM-12-17-130
Date: December 15, 2017
To: Members of the Grand River Conservation Authority
Subject: GRCA Managed Forest and Conservation Land Tax Incentive Program Participation

Recommendation:

THAT Report GM-12-17-130 – GRCA Managed Forest and Conservation Land Tax Incentive Program Participation be received for information.

Summary:

Significant portions of GRCA owned lands are classified as Managed Forest (MF) or Conservation Land (CL) for the purpose of property taxation. Eligibility for these tax classifications is determined by the Managed Forest Tax Incentive Program (MFTIP) and Conservation Land Tax Incentive Program (CLTIP). MF classified areas are taxed at 25% the residential tax rate, while CL classified areas are tax exempt.

A new ten year GRCA Managed Forest Plan and MFTIP application was prepared this year. As part of this process, staff completed a review and update of eligible lands for both programs.

For the 2018 tax year the GRCA has

- 200 properties (17,373 hectares - ha) which have MF eligible area (7904 ha), 113 of which also contain CL eligible area (5924 ha)
- 96 additional properties (1543 ha) that contain CL eligible area (1347 ha)
- 142 properties (360 ha) that do not contain MF or CL eligible areas

Report:

Conservation Authority owned lands are assessed and charged municipal taxes in the same manner as private landowners. There are three property tax classes that have a significant impact on how GRCA lands are taxed and whose eligibility is determined by Provincial tax programs:

- Managed Forest Tax Class – Managed Forest Tax Incentive Program (MFTIP)
- Conservation Lands – Conservation Land Tax Incentive Program (CLTIP)
- Farmland Tax Class – Farm Property Tax Class Rate Program (FPTRP)

Managed Forest and Farmland areas are taxed at 25% of the residential tax class rate, while eligible Conservation Lands are tax exempt.

Program Eligibility

Eligibility in the MFTIP requires

- A minimum of 4 ha of forest on each individual property
- A Ten Year Managed Forest Plan approved by a Managed Forest Plan Approver
- Submission of an application every 10 years and a Report of Activities every 5 years
- That forest management activities are carried out according to “good forestry practices” as defined in the *Forestry Act*.

Eligibility in the CLTIP is for specific areas identified by the Ontario Ministry of Natural Resources and Forestry (OMNRF) as having natural heritage features belonging to one of the following categories:

- provincially significant Areas of Natural & Scientific Interest
- provincially significant wetlands
- habitats of endangered species, where specific guidelines for the Conservation Land Tax Incentive Program have been developed by the Ministry of Natural Resources and Forestry
- areas designated as “Escarpment Natural Area” in the Niagara Escarpment Plan
- Community Conservation Land (restricted to non-profit charitable conservation organizations and conservation authorities)

CLTIP participation requires an annual application which verifies that the landowner will not undertake any activities that degrade the natural values of the eligible area. Only specific types of non-revenue generating management activities are permitted on CL eligible lands.

Eligibility in the FPTRP requires an application and that the lands must be actively farmed by the property owner or a tenant farmer either of which are required to have a valid Farm Business Registration Number.

GRCA MFTIP\CLTIP 2017 Review

During the preparation of an updated GRCA Forest Management Plan and MFTIP application this year, staff completed a review and update of eligible lands in the MFTIP and CLTIP.

As a result a number of amendments were made to properties’ MF eligible acres (both increases and decreases). Also, 23 additional properties were added to the MFTIP program. These additions were primarily properties which had new reforestation activities over the past decade. Amendments and additions resulted in a total increase of 1081 ha of MF eligible land.

CTLIP eligible acreage was clarified, amended or established with the OMNRF on approximately 25 properties resulting in a net overall increase in CL eligible acres on GRCA lands.

Table 1 – Summary of GRCA Lands by Tax Class

| Type | Number of Properties | New to MFTIP | Total Area MPAC Assess. (ha) | Total MF Eligible Area (ha) | Total CL Eligible Area (ha) | Total Farm Area (ha) | Total Other* Area (ha) |
|---------------------------------------|----------------------|--------------|------------------------------|-----------------------------|-----------------------------|----------------------|------------------------|
| Properties with MF eligible area | 200 | 23 | 17,373 | 7,904 | 5,924 | 828 | 2,716 |
| Properties with CL eligible area only | 96 | | 1,543 | | 1,347 | 105 | 90 |
| Properties with no MF or CL | 142 | | 360 | | | 19 | 341 |
| Totals (ha) | 438 | | 19,276 | 7,904 | 7,271 | 952 | 3,148 |

*primarily residential tax class

Financial implications:

Amendments made to areas classified as Managed Forest and Conservation Land will ensure the ongoing appropriate and accurate property taxation of GRCA lands. The overall increase in MF and CL eligible areas for the 2018 tax year will likely only have a small overall impact (decrease) on GRCA's total property tax expenditures.

Other department considerations:

The Natural Heritage staff will continue to assist the Property department with ongoing CLTIP and MFTIP eligibility requirements and program applications.

Prepared by:

Ron Wu-Winter
Watershed Forester

Approved by:

Nancy Davy
Director of Resource Management

Grand River Conservation Authority

Report number: GM-12-17-135

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Montrose Reservoir Project Update

Recommendation:

THAT Report GM-12-17-135 Montrose Reservoir Project Update be received as information.

Summary:

The Montrose reservoir project has been a proposed project since the 1930's as an option to provide flow augmentation and reduce flood damages. A number of studies in the 1930's, 1950's, 1960's, 1970's and 1980's evaluated the cost effectiveness of a new dam near West Montrose for water supply, water quality enhancement and flood damage reduction.

The 1982 Grand River Water Management Study included a detail technical and social economic analysis of water management plan options. The recommended Plan, Plan A4, recommended that the Montrose reservoir lands be protected for possible future water management purposes.

The history of the Montrose reservoir and future water management considerations was presented to the Grand River watershed Water Managers Working Group on December 6th 2017.

A Montrose reservoir is currently not in the Region of Waterloo master water supply plan, as it is considered to be beyond their current planning horizon of 2050. However, there was strong consensus with the Water Managers Working Group that it is prudent to maintain the Montrose Reservoir as a future water management option, given the uncertainties associated with climate change and the continued growth of the watershed population.

Report:

This report provides a history and status of the project that proposed to build a reservoir between Elora and the Village of West Montrose on the Grand River for low flow augmentation and flood management. The project is commonly referred to as the Montrose Dam or Montrose Reservoir in many reports.

There have been several studies since the 1930's that investigated flood reduction, water supply and water quality options for the Grand River watershed.

The initial water management plan was the Report on Grand River Drainage in 1932 by the Honourable William Finlayson, Minister of the Department of Lands and Forests, Province of Ontario, prepared for the Grand River Commission. Several recommendations from that report were implemented, most notably the construction of the Shand Dam in 1942 and the Luther Dam 1954.

The Grand River Hydraulics report was first issued in 1954 by the Ontario Department of Lands and Forests, Conservation Authorities Branch. It was updated in 1962. This report guided decision making by the Grand River Conservation Commission and the Grand Valley Conservation Authority. Various water management options were considered, to reduce flooding and improve water quality. The design objective of the 1954 report was to provide flood reduction capacity throughout the watershed to protect to a level of 1-1/3 times the magnitude of the 1947 flood. Two reservoir systems were proposed:

1. The Montrose System and
2. The Freeport System.

A summary of the proposed reservoir and dike system recommended in the 1954 report is presented by table 1. The Montrose dam was included in the Montrose Group option.

Table 1 Recommended Reservoir and Dyke Systems 1954 Hydraulics Report

| Reservoirs | System 1 Montrose Group | System 3 Freeport Group | Diking and/or Channel Improvements |
|-------------------|--|--|---|
| Conestogo | X | X | Cambridge-Galt |
| Guelph | X | X | Dryaton |
| Everton | X | X | Hespeler (a) |
| Ayr | X | X | Paris (b) |
| Hespeler | X | X | New Hamburg |
| Montrose | X | | Guelph (a) |
| Freeport | | X | |
| St. Jacobs | | X | Plattsville |
| Wallenstein | | X | Dunnville |
| Nithburg | X | X | |
| | | | Clearing River Bed |

The Grand River Conservation Commission prepared a report titled Plan for Flood Control and Water Conservation in the Grand River Watershed in June 1964. This report provided the basis for a request to the provincial government for financial assistance to build the Ayr Dam on the Nith and the Montrose Dam on the Grand River.

The Grand Valley Conservation Authority studied the construction of six dams between 1947 and 1966 which included: Everton, Guelph and Hespeler dams on the Speed River and the Collas, Lake, Princeton and Vandecar Dams on Whitemans Creek. Kilborn Engineering completed the Speed River Basin Report on Flood Control and Water Conservation in June of 1965. The Kilborn report included a detailed analysis of reservoir and channelization options for the Speed River to reduce flooding and improve water quality.

The Grand River Conservation Commission and Grand Valley Conservation Authority were amalgamated into the modern day Grand River Conservation Authority in April 1966. Following this amalgamation, a technical brief on Flood Control and Water Conservation for the Grand River Watershed was prepared by the Grand River

Conservation Authority August 1966. This brief consolidated previous flood control and water conservation studies, completed by the Grand River Conservation Commission and the Grand Valley Conservation Authority. The brief was submitted to the Federal and Provincial governments, requesting financial support to complete flood control, pollution abatement and water conservation projects. This brief included the Montrose Dam project. At that time, the Montrose Dam had the highest cost benefit ratio of any of the proposed dams. The recommended works from the 1966 report are presented by table 2.

Table 2 Brief on Flood Control and Water Conservation for the Grand River Watershed Recommended Works

| Reservoir | River | Benefit Cost Ratio |
|-------------------------------|-------------------|---------------------------|
| Montrose | Grand River | 1.38 |
| Ayr | Nith River | 1.01 |
| Guelph Everton Hespeler | Speed and Eramosa | 1.05 |

The Provincial Treasury Board prepared a 1971 report titled Review of Planning for the Grand River Watershed. This report investigated future water demands in the Grand River watershed, based on forecasted population growth. Water supply options to manage water quality and flood control were all investigated. The Montrose reservoir was omitted from the report recommendations, since the flood control and flow augmentation benefits were less when compared to other recommended reservoirs considered in the Treasury Board report. Other recommendations in the treasury board report included Guelph Dam, Woolwich Dam and acquisition of lands for the Everton, Hespeler and Ayr reservoirs.

Following the May 1974 flood, a provincial inquiry into the flood was completed by Judge Leach. The Royal Commission Inquiry into to Grand River Flood 1974 was published in February 1975. Judge Leach made a total of twenty-one recommendations. The first four recommendations were specific to dam construction and are included in the following:

1. That the GRCA embark immediately upon the construction of the Montrose Reservoir. This will control the Irvine River and provide flash flood storage in the system of 20,000 acre feet. This reservoir has been recommended by experts for the past twenty years, and had it been in existence in May, would have substantially decreased the flood damage in Cambridge-Galt.
2. That the GRCA carry out an exhaustive analysis of alternatives before proceeding with the construction of the other reservoirs recommended in the 1966 Grand River Conservation Authority Brief.
3. Recommendations 1 and 2 should be carried out with a view to terminating, as soon as possible, the interim policy of having full reservoirs by the end of May.
4. That some flood storage be maintained at all times in the new dams constructed.

Recommendation 1 specifically recommended construction of the Montrose Reservoir.

The Grand River Conservation Authority Water Management Advisory Board, after considering Judge Leach's recommendations, referred study of the Montrose Dam project to the Grand River Implementation Committee (GRIC) on May 28th 1975.

The Environmental Assessment of Water Control Structures in the Grand River Basin was commissioned in June 1975. The scope of the environmental assessment included

completing a review of the Montrose reservoir option and flood control options contained in the 1966 GRCA brief. The reservoir systems included for discussion and assessment are presented by Figure 1 and include both the Montrose and Freeport groups of reservoirs.

The flood reduction assessment included consideration of providing flood protection to the Regulatory Flood based on the Hurricane Hazel Regional storm. The environmental assessment was completed in June 1979 and generated four alternatives:

- Alternative A: Montrose Dam Completed by 1984
- Alternative B: Montrose Dam Completion delayed until 1996
- Alternative C: Montrose Dam Completion delayed until 2013
- Alternative D: Montrose Dam not built before 2030

Alternative A was recommended as the preferred alternative. The results of the Environmental Assessment were approved by the GRCA Board by resolution at the September 19th 1979 special board meeting. Actions to begin assembling land and completed final designs of the reservoir were initiated. Construction of the reservoir was not initiated, pending the outcome of the Grand River Basin Study. Detailed social and economic analysis of the four alternatives was delegated to the Grand River Basin Water Management Study.

The Grand River Basin Water Management Study was commissioned in 1977 by the Provincial Ministry of the Environment. This study was in response to the 1974 flood inquiry and the 1971 Treasury Board Report *Review of Planning for the Grand River Watershed*. The purpose study was to define the water management problems confronting the Grand River basin, and develop a viable set of alternative water management plans. The alternatives were designed to meet three water management objectives which included:

1. Reduce flood damages
2. Provide adequate water supply
3. Maintain adequate water quality

The investigation period for the study extended from 1977 to 1981. This study included a comprehensive analysis of the costs and benefits of various alternatives and included extensive public consultation. The study was completed in 1982. The final study recommended Plan A4 and included 21 recommendations.

Plan A4 was put forward by the Grand River Implementation Committee as cost-effective in meeting the three water management objectives, including future water supply and water quality considerations in addition to flood reduction. Plan A4 recommended major dike and channelization works in Brantford and Cambridge to reduced flood damages, increased levels of sewage treatment to improve water quality and withdrawals from the Grand River to supply a portion of Waterloo Region's drinking water supply.

Plan B2 recommended the Montrose Reservoir, advanced sewage treatment and withdrawals from the Grand River to supply a portion of Waterloo Region's drinking water supply. Water quality improvements were achieved by increased flow augmentation from the Montrose Reservoir and advanced sewage treatment. Flood reduction was achieved by flood regulation by the Montrose reservoir.

Plan A4 was preferred plan for the following reason:

- a) it is approximately \$25M cheaper than Plan B2

- b) its environmental and social impacts are moderate. The public participation program indicated that there would be opposition to the selection of Plan B2
- c) it maintains future flexibility by preserving the option of constructing the Montrose dam if future water quality or water supply problems require it.**
- d) It provides a high degree of flood protection for urban areas
- e) It provides for population growth by fully meeting projected municipal water demands and improving water quality in the central Grand River
- f) It improves water quality in the central Grand River, although the dissolved oxygen levels will not fully meet the provincial water quality objectives. While Plan A4 does not provide as high a water quality as Plan B2, it provides a reasonable level of protection for most water uses at a substantially lower cost.

A recommendation, E1, was specific to the Montrose Reservoir:

E. Recommendation to Protect the Montrose Reservoir Site

1. It is recommended that the Montrose reservoir site be protected for possible future water management purposes.

Protection of the Montrose reservoir site can be achieved by land acquisition and planning controls. Acquisition can be carried out over time by purchasing the land at the prevailing market price. Planning controls can be utilized in the form of land use and regulations and zoning.

At some time in the future the land can be either be sold, used for construction of a dam and reservoir, or preserved for other uses. In the meantime, the existing agricultural land use can be maintained and the site protected from development.

Recommendation E1 from the 1982 Grand River Basin Water Management Study was approved by GRCA Board resolution 443-82, which read as follows:

“THAT the Township of Pilkington and the Township of Woolwich be requested to enact local municipal zoning regulations for the protection of the Montrose Reservoir Site; and,

THAT, failing the accomplishment of the above, the Ministry of Municipal Affairs and Housing be requested to enact zoning orders for the protection of the Montrose Reservoir Site; and,

FURTHER THAT the Authority continue its present policy of acquiring land within the Montrose site within budgetary limitations.”

The GRCA completed an updated Water Management Plan in 2014. This updated plan was presented to the GRCA in board report GM-06-14-59 June 2014 and approved by resolution 73-14.

The updated water management plan included an action specific to the Montrose Reservoir,

“GRCA will continue to protect existing lands and acquire new lands, where appropriate, for future water management options near West Montrose and Everton”.

The acquisition limit for the Montrose reservoir is presented in Figure 2. This figure also presents the land acquired to date. The total area within the acquisition limit is 6 km² and the GRCA owns 2.8 km², 47.4% of that area.

The Montrose reservoir option was presented to the Grand River watershed Municipal Water Managers committee on December 6th 2017. There was consensus of municipal water managers that it is prudent to maintain the Montrose Reservoir in the future range of water management options. The recommendations of previous reports noted above, uncertainties associated with climate change, the continued growth of the watershed population and to maintain flexibility for future water management options all lead to consensus to maintain the Montrose Reservoir project as a future option

A Montrose reservoir is currently not in the Region of Waterloo master water supply plan since it is beyond the current plan horizon of 2050. GRCA staff consulted with Region of Waterloo staff regarding this initiative, and it was determined that it is prudent to continue to preserve the Montrose reservoir in the future range of options.

If building the Montrose Reservoir was pursued in the future, an Environmental Assessment would be required.

Land owned by GRCA beyond the acquisition limit will be not required for the Montrose reservoir may be disposed of over time as opportunities arise.

Financial implications:

Expenses related to this project in the foreseeable future would relate to land acquisition and preparing for disposal of surplus land beyond the acquisition limit. These expenses could be funded from the land sale reserve.

Other department considerations:

Not applicable

Prepared by:

Dwight Boyd
Director of Engineering

Approved by:

Joe Farwell
Chief Administrative Officer

Figure 1 Reservoirs Considered in 1979 EA of Water Control Structures

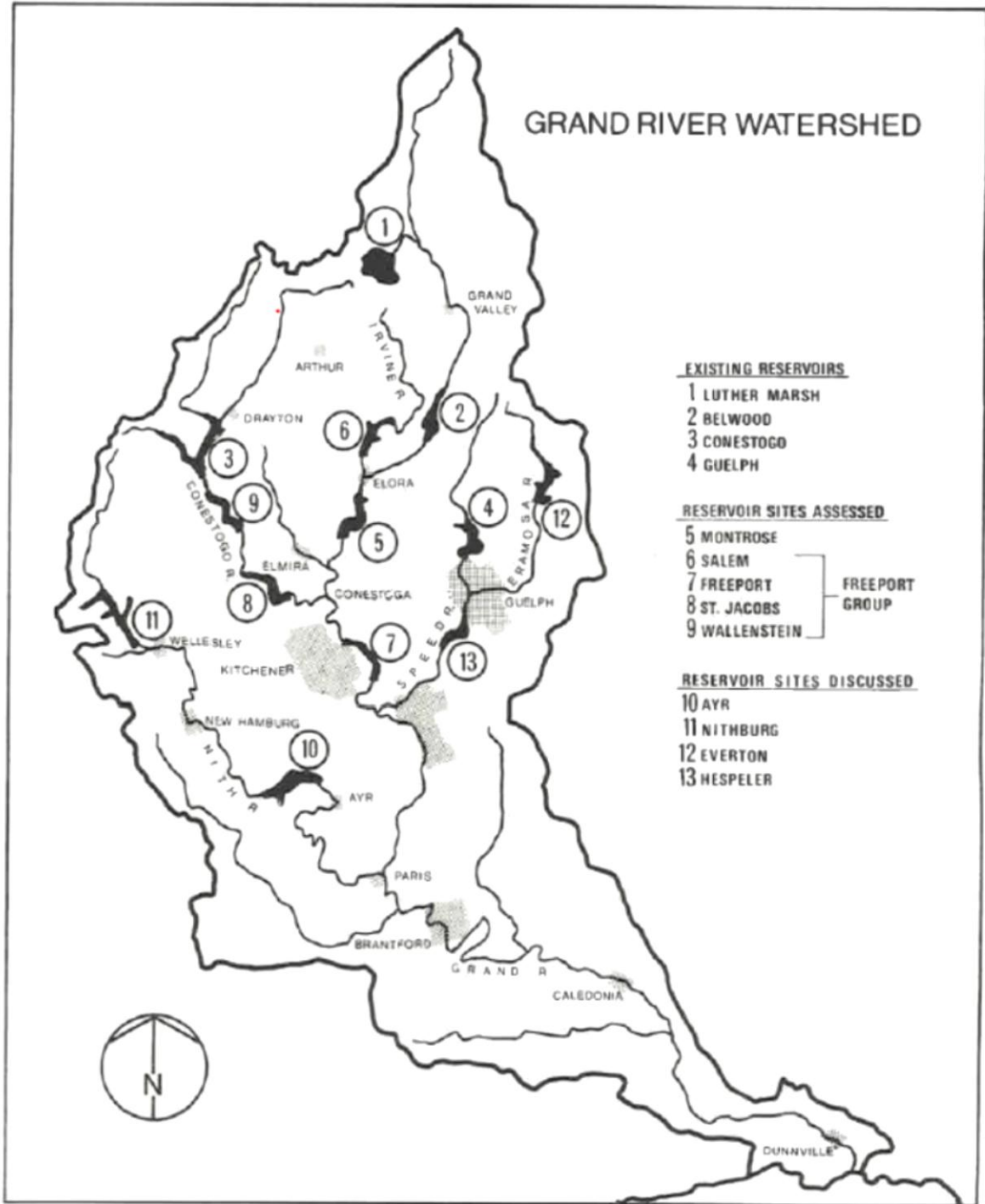
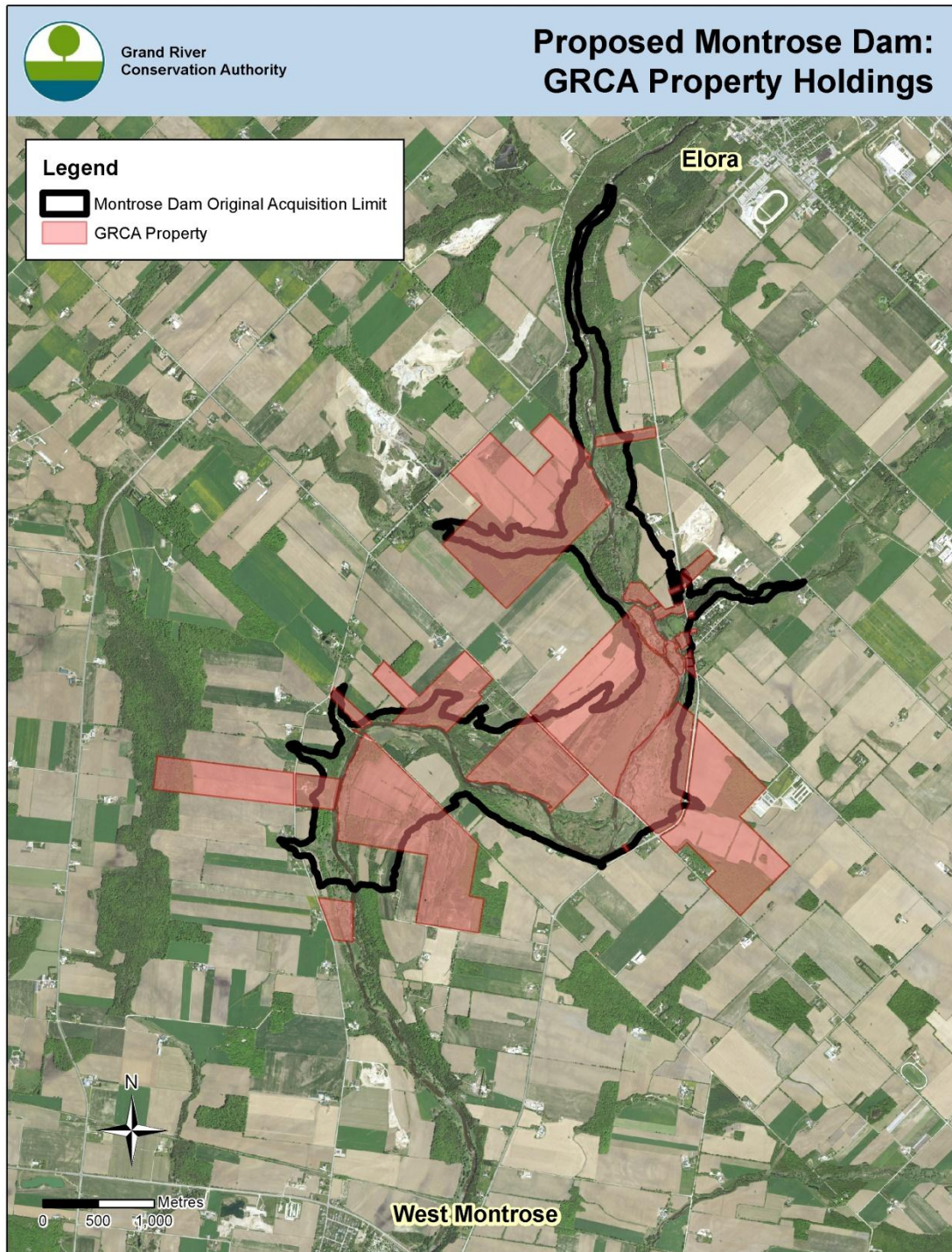


Figure 4-1

The Grand River Basin Sites of Montrose, Freeport and Nithburg Reservoir Groups

Figure 2 Montrose Reservoir Acquisition Limit and Current GRCA Property Holdings



Grand River Conservation Authority

Report number: GM-12-17-136

Date: December 15, 2017

To: Members of the Grand River Conservation Authority

Subject: Current Watershed Conditions as of December 6, 2017

Recommendation:

THAT Report GM-12-17-136 – Current Watershed Conditions as of December 6, 2017 be received as information.

Report:

Precipitation

Precipitation in the first week of December was close to the long term average with all of the measureable precipitation falling as rain. Snow is forecast for the second week of December.

To date in 2017, all of the Grand River Conservation Authority climate stations have already recorded above the normal total annual precipitation. The Environment Canada station at the Brantford Airport has recorded a bit less and is at 99% of normal as of December 6th. Normal annual precipitation varies across the watershed from about 850mm in the south to about 950mm in the north. In 2017, with the exception of Woolwich and Brantford, all of the climate stations have recorded over 1000mm of precipitation.

The Luther Dam climate station recorded the most precipitation in 2017 with 1234mm to date or 130% of normal for the entire year. 2017 ranked the third highest annual precipitation since 1961 at this station. Annual precipitation at Luther Dam is shown in Figure 1.

Table 1 includes monthly and recent precipitation trends for select watershed climate stations. Added to Table 1 is the percent of annual precipitation on a calendar year basis.

Table 1: Precipitation Averages at Watershed Climate Stations

| Station | Monthly Precipitation | | Percentage of Long Term Average | | | | | Year |
|-----------|-----------------------|------------------------------|---------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|------|
| | 6-Dec (mm) | Long Term Average (mm) | Last Full Month | Last 3 Full Months | Last 6 Full Months | Last 12 Full Months | Last 15 Full Months | |
| Shand | 10.6 | 74.2 | 106% | 94% | 108% | 133% | 120% | 115% |
| Conestogo | 10.2 | 83.0 | 104% | 106% | 119% | 134% | 117% | 120% |
| Guelph | 13.2 | 71.1 | 113% | 97% | 101% | 136% | 122% | 125% |
| Luther | 16.0 | 82.2 | 92% | 105% | 132% | 143% | 127% | 130% |
| Woolwich | 9.6 | 76.5 | 104% | 100% | 100% | 124% | 113% | 111% |
| Laurel | 11.2 | 71.5 | 99% | 88% | 90% | 120% | 109% | 109% |
| Shades | 16.6 | 74.4 | 113% | 84% | 104% | 129% | 119% | 118% |
| Brantford | 6.4 | 69.5 | 105% | 79% | 83% | 106% | 100% | 99% |

Air Temperatures

The first week of December was warm with the average temperature well above the freezing point. Normal average temperatures for early December are a degree or two below zero.

Average air temperature for the year was above the long term average. 2017 started out fairly warm with winter and early spring temperatures about 3 degrees above normal. The late spring and summer period felt cool this year, but were very close to the long term average. Then warm temperatures returned in early fall with temperatures about 3.5 degrees above normal. The year is ending with close to normal temperatures.

Figure 2 presents the mean annual air temperature recorded at Shand Dam since 1990.

Long term average temperatures were last calculated using the 1960 to 1998 period. The long term average temperatures are being updated and will be available for the January watershed conditions report.

Lake Erie Conditions

The level of Lake Erie continues to be well above the long term average. The average lake level in November was 174.53m, which is approximately 0.53m above the long term average. Forecast water levels for the next few months were not available for this report. High lake levels increase the potential for Lake Erie shoreline flooding by lake-surge events.

Reservoir Conditions

Water levels in the four large reservoirs are at their normal level for this time of the year. Water levels have been a bit variable throughout the fall period in response to numerous rainfall events.

Over the next month, reservoir levels will be stabilized near the upper rule curve moving into freeze up. During the winter period reservoir discharges are used to augment river flows to aid in wastewater assimilation and to maintain flows for ecological purposes.

Reservoir levels for 2017 are shown in Figures 3 and 4 for Shand Dam, Conestogo Dam, Guelph Dam, and Luther Dam.

Long Range Outlook

Environment Canada's seasonal forecast is predicting above normal temperatures for Southern Ontario for the December to February period. Forecasts from other agencies are calling for below normal temperatures. All forecasts are predicting higher than normal precipitation, especially in areas prone to lake effect snow squalls.

Flood Preparedness

Conditions are being monitored closely. Staff continue to hold weekly Senior Operator meetings as part of overall succession planning initiatives and flood emergency preparedness.

Staff participated in an emergency planning exercise with Township of Woolwich on December 7, 2017.

Financial implications:

Not applicable

Other department considerations:

Not applicable

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Figure 1: Annual Precipitation at Luther Dam 1961 to 2017

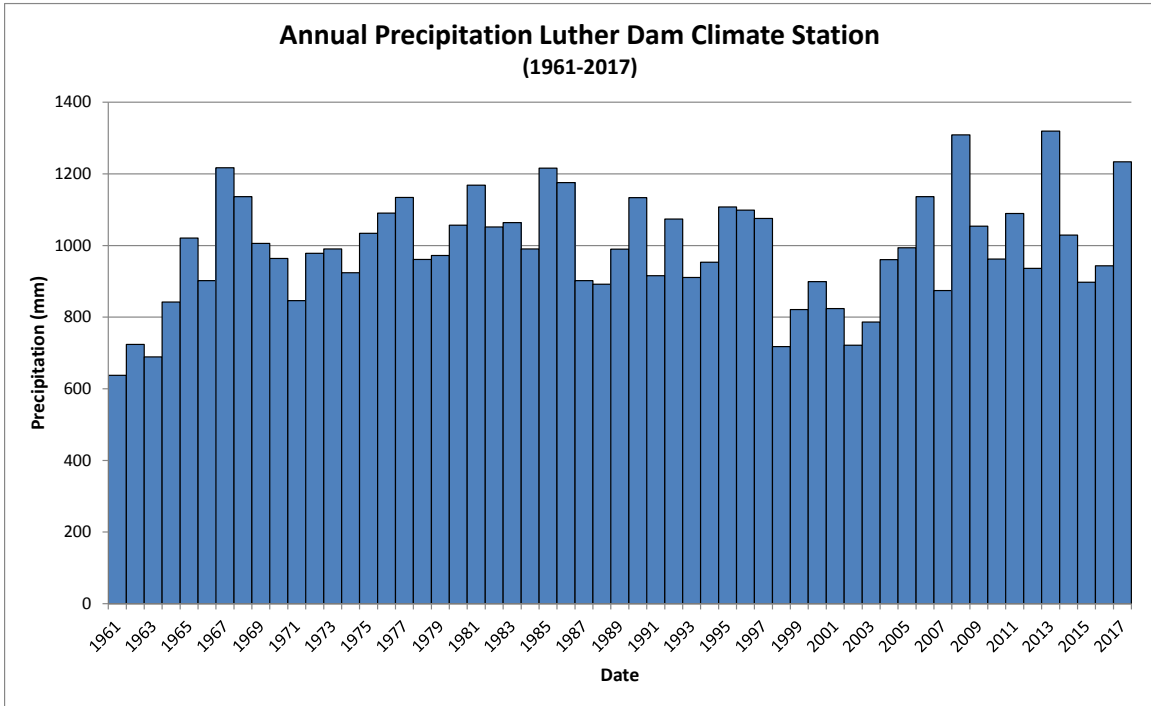


Figure 2: Departures from Average Air Temperatures

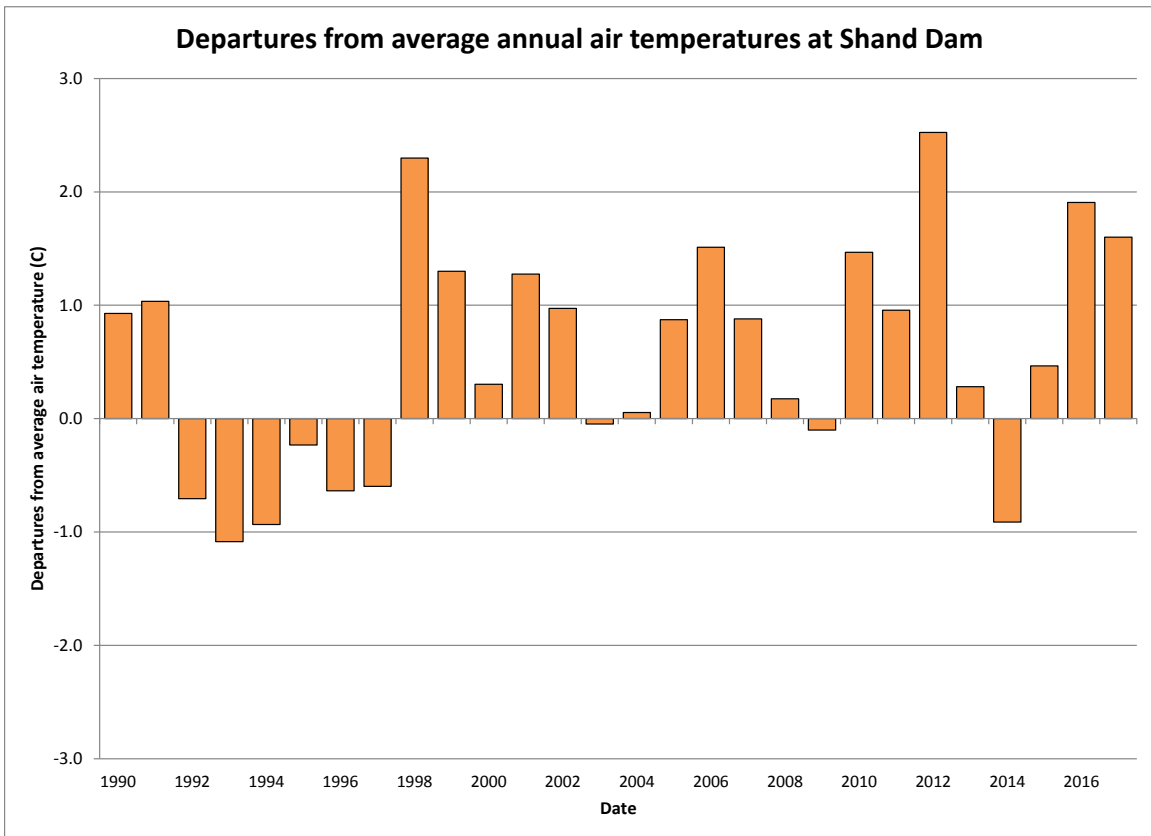


Figure 3: Shand and Conestogo Reservoir Elevation Plots

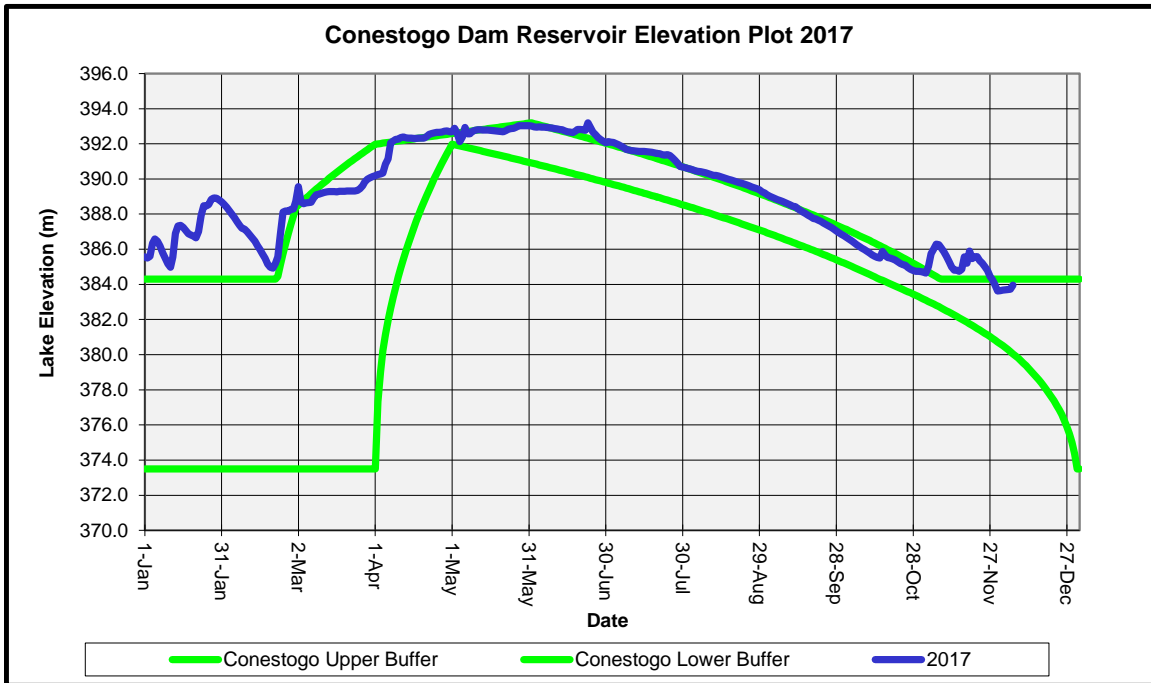
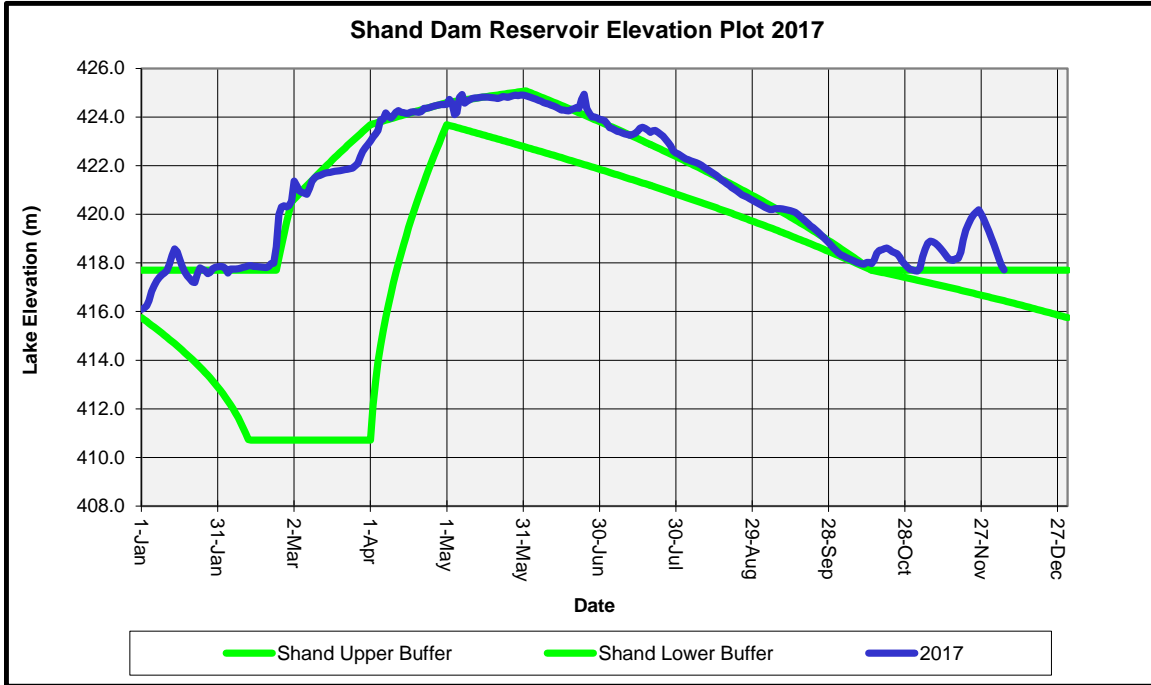
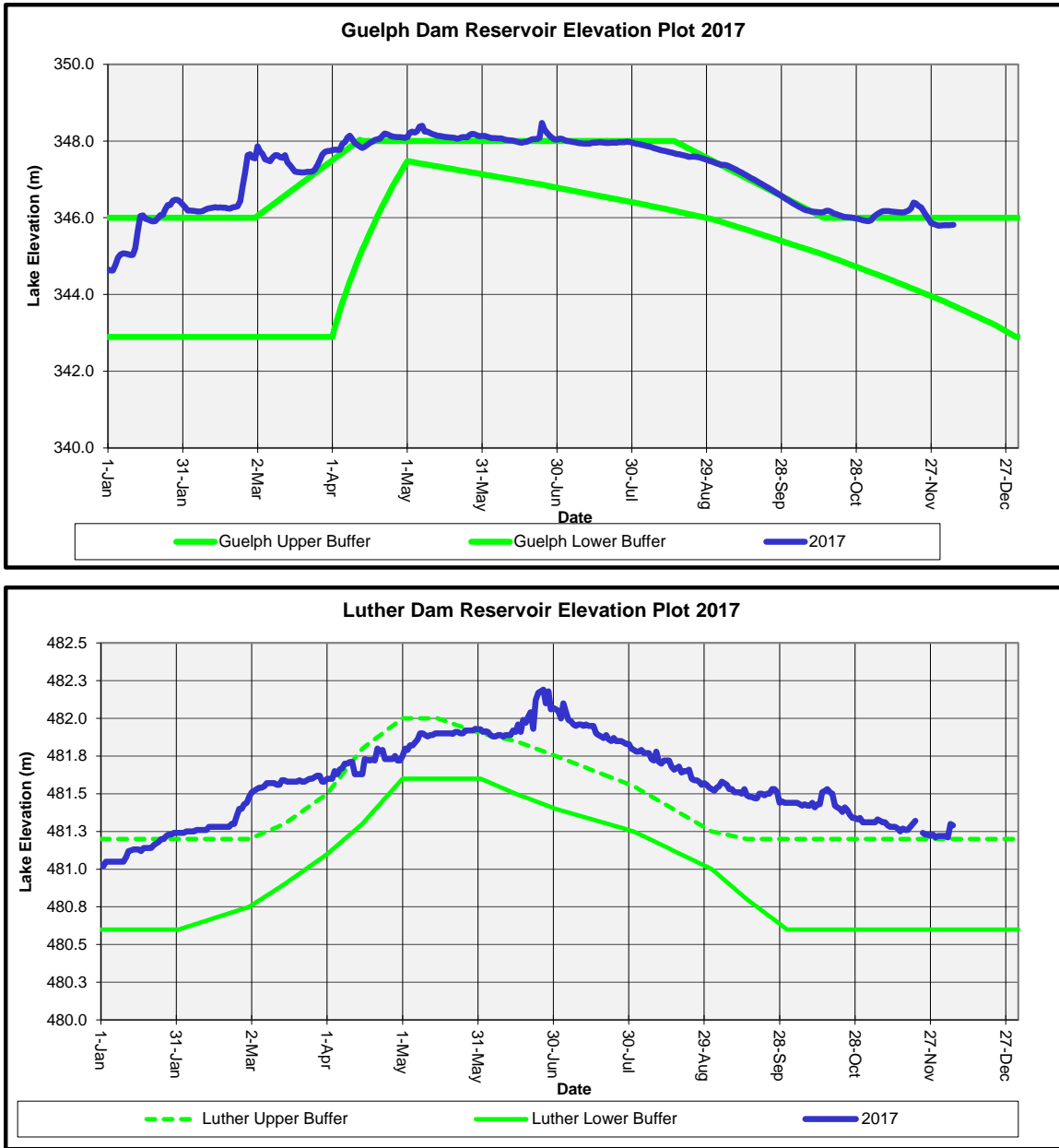


Figure 4: Guelph and Luther Reservoir Elevation Plots



Luther Dam Operating Curves

Luther Dam primarily provides a flow augmentation function to the upper Grand River and to Shand Dam. While it does provide some benefits from a flood control perspective, these benefits are limited due to the small drainage area regulated by Luther Dam.

The buffers between March 1st and September 30th define the operating range to meet downstream low flow targets. The lower buffer defines the lowest operating range for flow augmentation before reducing downstream flow augmentation targets. The earlier winter (January 1st to March 1st) and late fall (October 1st to December 31st) upper buffer curve is defined from ecologic considerations from the Luther Marsh Master Plan.